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Agriculture

Forest  
Service

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# **Smith Creek Vegetation Treatment Project**

## **Decision Notice Affirmation of Prior Decision**

### **Revised Finding of No Significant Impact & Response to Comments**

**Yellowstone Ranger District  
Livingston Office  
Gallatin National Forest  
Meagher County, Montana**

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## **Introduction**

As a result of the September 15, 2010 opinion (Case 09-35896) of the 9th Circuit Court of Appeals regarding the Smith Creek Vegetation Treatment Project, additional information and analysis was released to the public in a second Supplemental EA (January 10, 2011) addressing the Court's holding that "the Service violated the Gallatin Plan and NFMA by not ensuring that the Project complies with the current Gallatin Plan elk-cover requirement." The opinion further stated that the "Plaintiffs' single meritorious argument on appeal concerns the Gallatin Forest Plan's elk-cover requirement (p. II-18, section 6.a.5)."

Based on protocol described in the Gallatin Forest Plan Hiding Cover Standard Assessment (Appendix A-Supplemental EA), additional screening and field sampling was conducted and analyzed, a new baseline for calculating hiding cover "over time" was established (per the Court's request), and results from the new analysis was compared with the original hiding cover analysis. The analysis and interpretation guidelines that were followed are spelled out in detail on pp. 24-26 of Appendix A-Supplemental EA.

The field survey protocol that was used is described in literature (Lyon and Marcum 1986, Smith & Long 1987) and included the use of cover boards and life size elk decoys that were viewed from randomly selected GPS points on the ground. Field data was summarized and averaged over each photo-interpreted (PI) strata sampled. A complete description of the field sample protocol that was used is included on pp. 35-36 of Appendix A of the Supplemental EA. The field validation analysis indicated that PI stratum classified as  $\geq 40\%$  canopy cover were "capable of hiding 90% of an elk at 200 feet or less" (p.39).

Conclusions from this comparison of analyses found no substantial changes in the relative amounts of baseline or existing hiding cover between the original EA (USDA 2007) and the 2011 Supplemental EA analysis. Mitigation measures and design criteria outlined in the original EA and the first Supplemental EA (USDA 2008) would apply to habitat components, ensuring the retention of hiding cover. The hiding cover analysis provided in the 2011 Supplemental EA demonstrates that the original decision for the project would be in compliance with the Gallatin Forest Plan standard for maintaining "at least two-thirds of the hiding cover associated with key habitat components over time".

## **Project Area Description**

The Smith Creek Vegetation Treatment Project Area has been identified as a wildland/urban interface area by the Park County Community Wildfire Protection Plan (2006). The analysis area for the project is located in the Crazy Mountains along the northeast corner of the Yellowstone Ranger District, approximately 35 miles north of Livingston, Montana. It is bordered on the west and south by the Gallatin National Forest boundary, private lands, and by the Lewis & Clark National Forest boundary to the north and east. The approximately 23,000 acre

analysis area consists of the wildland urban interface (WUI) boundary as defined by the Park County Community Wildfire Protection Plan (CWFPP). The analysis area consists of a mixture of National Forest System (NFS) and interspersed private lands. See Vicinity Map (M-1) and Activity Area Overview Map (M-2).

The project area, located in T5N, R9E, Section 1 & T5N, R10E, Sections 4, 6, & 8, consists of the portions of the Smith Creek WUI that are in the closest proximity to residences, other structures, and primary transportation routes. The communities at risk are located in Sections 5, 6, and 7 of T5N, R.10E. Numerous private residences are located within the project area, many of which are located along the Smith Creek Road #991. The largest concentration of residences (approximately 30) within the forest boundary is the Smith Creek subdivision. These residences are a combination of summer cabins and year round residences, which have been identified as a community at risk from wildfire by the recently completed Shields River Watershed Risk Assessment (USFS 2005a) and Park County Community Wildfire Protection Plan. The reasons for the high fire risk rating include limited access and heavy fuel loadings, both along the travel routes and within/adjacent to the subdivision.

## **Project Background**

The Environmental Assessment (EA) for the Smith Creek Vegetation Treatment Project was released to the public for a 30 day comment period on August 15, 2007. The subsequent Decision Notice and Finding of No Significant Impact (FONSI) were released to interested parties on December 18, 2007.

A lawsuit challenging the project was filed jointly by three Parties on July 18, 2008 in the United States District Court for the District of Montana, Missoula Division. The Honorable Judge Donald Molloy reviewed the case and on October 30, 2008 issued a Court Order (CV 08-92-M-DWM) found for the plaintiffs on one of their claims and remanded the decision to the Forest Service to conduct mapping of key habitat components as required by Forest Plan Standard 6.a.5. (p. II-18, Gallatin Forest Plan, 9/87). The Judge found that “the EA does not comply with mapping requirements for elk, but does comply with hiding cover and security cover requirements.” The order states, “While the Forest Service has complied with the law for the most part, it is deficient regarding mapping of key habitat components for elk. Consequently, in the absence of that mapping, it is impossible to fashion a remedy that could permit the project to go forward.” The court enjoined the project pending completion of the required remand. There were no NEPA deficiencies found by the Court.

Supplement to the Smith Creek EA addressing the Forest Plan NFMA deficiency identified by the Court Order was prepared and mailed to interested parties for a 30-day comment period in November 2008. Comments were received from six interested parties and were responded to by the appropriate resource specialist. The responsible official, District Ranger Archuleta, reviewed the Supplemental EA, public comments, and FS responses, coming to the conclusion that new information gave him no reason to supplement, correct, or revise the December 18, 2007 decision for the project. Therefore a Decision Notice/Affirmation of

Prior Decision and Revised Finding of No Significant Impact was released on March 6, 2009, which re-affirmed that the original decision should remain in effect and unchanged.

The decision was appealed in April of 2009. On June 5, 2009 a new lawsuit was filed (CV 09-79-M-DWM) in the US District Court of Missoula reasserting the claims set forth in the original complaint that the Forest Service failed to comply with the Court's order to map elk habitat. The Court entered an order consolidating the plaintiffs' two actions and stated that it retained jurisdiction to modify or dissolve its earlier Order enjoining the project. On October 8, 2009 the District Court issued an Order (CV-00092) and final judgment in favor of the Forest Service regarding the project, stating that the Forest Service had complied with the terms of the Court's Order requiring the agency to map the "key components" of elk habitat. The Order went on to state that the injunction formerly entered by the Court was dissolved and the Forest Service may proceed with the Smith Creek Vegetation Project.

On October 9, 2009 the Plaintiffs filed an appeal to the Ninth Circuit Court of Appeals and once again moved the District Court for interim injunctive relief which was denied on November 9, 2009. The Plaintiffs then sought injunctive relief from the Ninth Circuit Court, which was granted in part and denied in part on December 21, 2009. The Plaintiffs' filed a motion for clarification of the December Order and on February 4, 2010 the case was heard in the Ninth District Court. After consideration of the records and briefs of both parties, as well as the oral arguments the Ninth Circuit Court reversed the District Court's Order dissolving the permanent injunction and granted a stay on the entire project on February 8, 2010.

On September 15, 2010 an Opinion (Case 09-35896) regarding the Project was issued by the Ninth Circuit Court of Appeals. The opinion affirmed the District Court's grant of summary judgment to the Forest Service in almost all respects; however, it stated that the Forest Service failed to ensure that the project was in compliance with the Gallatin Forest Plan's elk-cover requirements, which is a NFMA violation. The Ninth Circuit Court remanded to the Forest Service to remedy the error.

Additional hiding cover field data was collected, a new baseline for calculating hiding cover "over time" was established, and results from the new analysis were compared with the original analysis. Results of the new analysis confirmed that post-treatment hiding cover would meet the requirements of the Gallatin Forest Plan standard (p. II-18)

A second Supplemental EA addressing the hiding cover remand was issued to the public for a 30 day comment period on January 10, 2011. Twelve comment letters were received from interested parties or groups. A summary of the comments received and the Forest Service responses are attached with this document.

## **Decision**

I have thoroughly reviewed the original decision (December 2007) for the Smith Creek Vegetation Treatment Project in conjunction with the information provided in the Supplemental EAs (2008, 2011), revised finding of no significant impact (FONSI), and have also considered public comments and Forest Service responses. After doing so, I conclude that my original decision for the project will remain in effect and unchanged. I found nothing in the additional data collected, analyses conducted, or additional public comments that gave me reason to believe that there would be changes needed to project design or the treatments proposed. I have determined that the range of effects and disclosure of potential impacts from the project as displayed in the original analysis is still valid. There is no need to modify the original decision based on any of the supplemental information. As stated in the Forest Service Handbook (FSH) 1909.15, “Reconsider the original decision, and based upon the EA and FONSI, issue a new decision notice or document that the original decision is to remain in effect and unchanged.”

In my decision, Alternative 3 (Proposed Action & Meadow Creek Burn), as described in the 2007 EA, was selected for implementation. In summary, this alternative will mechanically thin and/or hand-treat vegetation on up to 810 acres, and conduct prescribed burning on an additional 300 acres. This proposal was developed by identifying “at risk” areas containing high fuel hazard ratings relative to improving public and firefighter safety, as well as identifying key portions of Smith Creek and the East Fork of Smith Creek roads that are currently contributing sediment to these creeks. Stands of trees with high potential for stand replacement fire to affect lives and property in this wildland urban interface (WUI) area are included for treatment. Stands where vegetation treatments would maintain and/or improve wildlife habitat (meadows, Douglas-fir stands, aspen), and/or reduce susceptibility to existing and future insect and disease outbreaks are also considered to be high priority.

Mechanized equipment will not be allowed within Streamside Management Zones or wet areas (unless frozen) in conformance with the State of Montana Best Management Practices (BMP’s) as outlined in Appendix B of the EA.

No new permanent or temporary roads will be constructed. Existing project roads and trails (roads that were used for past logging activities and/or trails being used for motorized vehicles) will be utilized. Some of these project roads and trails (#7110 & #7110E) will need to be reopened to provide access to treatment units (See the EA, Table A-24, pp. A-103 thru A-109). Reopened project roads and trails that are located on National Forest System lands will be closed to the public during project related activities and permanently closed and rehabilitated following harvest and post-harvest activities. Rehabilitation will make these roads and/or trails impassable for future motorized travel. Old skid trails (located in proposed Units B, D & G) that have re-vegetated will have coarse woody debris scattered on them to deter ATV usage and provide additional nutrients for soils.

Three road treatment packages for maintaining/improving roads within the project area are included in my decision (See EA, Table A-24, pp. A-103 through A-109 for detailed descriptions). Road Treatment A will be completed during/following implementation of harvest related activities. Road Treatments B & C will be completed to the extent that funds, from the sale of timber products or other available sources, are available. Special Forest Service funding allocated for road treatment projects became available in 2010-2011 and all portions of Treatments B & C except for the complete surfacing of the roads with 6" of gravel are funded and will be completed by fall of 2011. For locations of road treatments see Map M-6 of the EA.

## **Purpose and Need for Action**

The purpose and need for this integrated vegetation treatment project is as follows:

To modify potential wildfire behavior by creating vegetation and fuel conditions that provide for safer firefighter response and public evacuation in the event of a wildland fire.

- To improve wildlife habitat diversity by maintaining meadow and aspen areas, and decreasing tree densities in Douglas-fir stands, thus creating open park-like stands.
- To decrease tree densities in the WUI adjacent to private lands, so that the remaining trees are less susceptible to future insect and disease infestations.
- Note: My decision (Alternative 3) includes vegetation treatments only on National Forest System (NFS) lands. Private landowners are responsible for fuels reduction treatments and structure protection measures on privately owned property.

In addition to the primary purpose and need for the project, there are opportunities, as identified in the second project scoping (9/29/2006), to provide benefits to water quality and fish habitat for Yellowstone cutthroat trout by improving drainage and surfacing on project area roads that are adjacent to creeks. Outside funding was obtained for the maintenance of problem areas (sediment sources) on these roads in the summer of 2007 (completed in 2008), prior to any project activity (See Map M-5). These road treatments are necessary to reduce sediment introduction into the adjacent creeks whether or not the vegetation project is implemented, thus would not be considered a connected action (40 CFR 1508.25) to the project. The opportunity to fund this road maintenance was elevated because the area was in the planning stages for a vegetation treatment project. Additional road maintenance treatments to further improve drainage and surface conditions on the Smith Creek Road and the East Fork of Smith Creek Road (Road Treatments B & C, Table A-24, Map M-6) are included as a part of this project. These treatments, with the exception of the complete surfacing of the roads are currently funded and in the process of completion. A complete description of the various road treatments is outlined on pp. 1-6 & 1-7 of the EA.



The following ecosystem restoration activities were also proposed:

- Placement of woody debris on old skid trails previously utilized for harvest activity to deter ATV usage and provide nutrients for soils.
- Aspen exclosures and/or fencing, if needed, to protect aspen regeneration.
- A toilet facility at the ATV parking area.
- Hiding Cover Effects Analysis

The analysis and conclusions presented in this Supplemental EA are based on and does not change the Smith Creek Vegetation Treatment EA (2007) or Supplemental EA (2008) analysis for big game except for the new hiding cover analysis which specifically addresses the court findings required for resolution of the remand. The remainder of this report is organized as such.

## **Scope of the Decision**

The Council of Environmental Quality (CEQ) regulations implementing NEPA define the "scope" of an action consisting of "...the range of actions, alternatives, and impacts to be considered". To determine the scope, federal agencies shall consider three types of actions; (1) connected actions; which are two or more actions that are dependent on each other for their utility; (2) cumulative actions; which when viewed with other proposed actions may have cumulatively significant effects and therefore be analyzed together; and (3) similar actions; which when viewed with other reasonably foreseeable or proposed actions have similarities that provide a basis for evaluating their environmental consequences together. (40 CFR 1508.25).

The scope of the vegetative treatment actions included in my decision is limited to stand density reduction and the reduction of fuel loadings on National Forest Land including:

- Thinning and/or harvest of medium and large diameter (>6" dbh) green conifers to meet unit objectives
- Harvest of insect or disease damaged/killed conifers except where needed to meet snag retention requirements.
- Thinning of Post & Pole size green conifers (4" to 6" dbh)
- Slashing of small diameter conifers
- Harvesting and/or slashing of conifers encroaching into meadows and aspen stands.
- Piling and removing and/or burning of downed woody materials and fuels resulting from treatment actions.
- Prescribed burning in the Meadow Creek area (Unit J) is included in Alternative 3.

Other actions that are within the scope of the project that would be completed are cleanup and maintenance of project area roads (Described on pp. 1-6 & 1-7 and in detail in the EA, Table A-24, pp. A-103 through A-109 & Map M-6) and ecosystem restoration activities including weed monitoring and spraying, aspen

monitoring and protection measures, placement of woody debris on approximately four miles of previously utilized skid trails, and rehabilitation of user created ATV trails within the Project Area.

Other ecosystem restoration items that may be completed if funding allows, include additional road maintenance (surfacing of all or portions of Smith Creek and East Fork of Smith Creek roads), aspen fencing, and a toilet at the ATV parking area at the junction of roads #991 and #7710.

## **Detailed Description of the Decision**

### **Alternative 3-Proposed Action & Meadow Creek Burn (Selected Alternative)**

Based on information provided in the EA and Project File, I concluded that Alternative 3 (Selected Alternative) best addressed all elements of the purpose and need for the project. This alternative was developed considering the areas of high fuel hazard, high risk of human-caused ignition, and high social values. Alternative 3 emphasizes treating those stands where thinning and reduction of conifer encroachment will improve public and firefighter safety, will maintain and/or improve wildlife habitat by reducing meadow encroachment, creating open park-like Douglas-fir stands, enhancing aspen regeneration, and/or would reduce the risk of insect and disease outbreaks. All harvest units associated with Alternative 3 lie on National Forest System lands to be administered as Management Area 8 (timber) with some units having linear inclusions of Management Area 7 (riparian), both of which allow for commercial timber management in the Gallatin Forest Plan. Unit J, which consists of a 300 acre prescribed burn in the Meadow Creek area, would have firefighter and public safety benefits, will improve wildlife habitat through the reduction of ladder fuels in open Douglas fir stands and will reduce conifer encroachment, thus increasing the integrity of grassland/park habitats.

Pre-activity road maintenance treatments (not part of this decision) to improve drainage and reduce sediment concerns on Smith Creek Road (#991), East Fork of Smith Creek Road (#6635), and Goat Mountain Road (#6636) were completed in 2008.

Ecosystem restoration activities that will be completed with implementation of Alternative 3 include Road Treatment A, clean-up and blading of roads utilized for harvest activities (See Table A-24, A-103 through A-109, Map M-6), hand treatments (thinning and slash removal), mechanical treatment of non-merchantable fuels in units, aspen regeneration monitoring, noxious weed monitoring and treatments, and placement of woody debris on old skid roads and entrances to user-created ATV trails where they intersect system trails or roads.

If additional funds are available from the value of timber products once the above-mentioned activities are completed, other ecosystem restoration activities that will be implemented include some or all of Road Treatments B & C (See EA,

Table A-24, A-103 through A-109, Map M-6), aspen exclosures and/or fencing (if needed to protect regeneration), and a toilet facility at the ATV parking area.

Map M-5 displays the units of treatment associated with Alternative 3 (Selected Alternative). My decision includes vegetation treatments on a maximum of 810 acres in ten separate units. Stand density reduction utilizing ground-based harvest equipment will occur on a maximum of 435 acres on slopes up to 35%, harvesting both large and small diameter trees. A maximum of 145 acres of thinning/density reduction on slopes >35% will utilize helicopter logging, and approximately 230 acres will consist of hand-treatments (removal of ladder fuels, limbing of large diameter trees, and thinning of small diameter trees). Hand-treatments will occur in sensitive areas (riparian), areas where trees are too small for commercial harvest operations, and in some units after commercial harvest operations have been completed. Leave tree spacing will be highly variable between units and consist of a mixture of patches of multi-storied trees as well as open-spaced individual trees. This irregular stand structure will break the continuity of vertical and horizontal fuels among individual trees. Prescriptions will vary between adjacent units to disrupt the continuity of fuel conditions among stands.

Prescriptions for aspen stands (Units A1 & G) will remove approximately 85% of the conifers while leaving approximately 15% of the healthiest conifers in clumps or individually (where wind-firm and greater than 100 feet from aspen clumps). All aspen will be retained. Small diameter trees and activity fuels will be slashed, piled and burned, or otherwise removed as forest products, with a maximum of 15 tons/acre of downed woody debris left on average in each treatment unit. Additional aspen enhancement opportunities exist in Units B & D where all conifers will be removed within 100 feet of aspen clones.

Prescriptions for the proposed treatment units included in the Selected Alternative can be found in Table 1 below: Table 1 displays individual unit information including approximate acres, objectives for the unit, proposed treatments, and mitigation needed to protect resources. Design criteria and mitigation measures for the units can be found in the EA, pp. 2-30 through 2-39.

Normal operating period for mechanical harvest, skidding, and mechanical slash piling will be from November 1 to April 30 over frozen ground and/or 8 inches of snow in units using ground-based equipment. Units utilizing helicopter harvesting and/or hand-treatment will not be restricted to the winter months (See design criteria and mitigation EA, pp. 2-30 through 2-39). Hand or helicopter treatments will not be conducted in any of the proposed vegetation units during archery season (beginning 9/1 through 10/15). Exceptions to this restriction will only occur after consultation with Montana Fish, Wildlife, and Parks.

Harvest and skidding activities must be completed on a given unit within one season, unless extreme weather conditions prohibit completion. Log hauling for all units will occur over dry or frozen roads to minimize damage to roads and address sediment concerns. Mechanized equipment will not be allowed within Streamside Management Zones or wet areas in conformance with the State of Montana Best Management Practices (BMP's) and the Trout Unlimited Agreement.

Within commercially harvested units, up to 15 tons per acre of coarse, downed woody material on average will be maintained in each treatment unit where available. Activity created slash in excess of 15 tons per acre will be piled and burned. Burning will only occur during the spring (April/June) and fall (late September/November) seasons.

No new road construction will occur (permanent or temporary) with my decision. Existing roads on both private and National Forest lands will be used to access the treatment units. One of the key factors in determining the use of existing roads on private lands is whether permission to use the roads can be obtained. Existing roads on either ownership will require maintenance to support safe and efficient use, consistent with project design criteria and mitigations. Existing project roads and trails (roads and trails that have been utilized for past logging activities) will also be utilized. Some of these project roads and trails will need to be reopened to provide access to treatment units (#7110 & #7110E).

Reopened project roads and trails that are located on National Forest System lands will be closed to the public during project related activities and those that are no longer needed following harvest activities will be permanently closed and rehabilitated, consistent with the recent Gallatin National Forest Travel Plan decision. Rehabilitation will make these roads and/or trails impassable for future motorized travel and will include other necessary resource protection practices. See the EA, Table A-24 for detailed road information. Existing skid roads in Units A1, B, & D will have 5 tons/acre of coarse woody debris scattered along up to four miles of old skid roads after harvest activities are completed to help improve soil quality and to deter ATV use on these trails. Designated motorized routes listed in the 2006 Gallatin National Forest Travel Plan will not be included for woody debris treatment.

Treatment in Unit J will consist of prescribed fire techniques to create a mosaic pattern within the unit. Smaller trees will be targeted, specifically in the grassland/park structures and open Douglas fir stands. In areas that lodgepole pine and sub-alpine fir dominate, passive crown fire will be expected for a short duration to mimic a mixed severity fire effect. Fuel treatment objectives for Unit J are to achieve a balance between leaving a moderate amount of material on the ground to provide nutrients for soil replenishment, but not so excessive as to add to an uncontrollable wildfire. An average of approximately 10 to 15 tons per acre of materials will be left on the ground in each unit, which will likely only support a readily controllable, low-intensity ground fire.

Past fire occurrences within the area have demonstrated that fires tend to burn more actively from the southwest to the northeast (Smith Creek Fire in 1994). The implementation of Unit J will buffer the upper reaches of the East Fork of Smith Creek and potential wildfires that could flank west around Billie Butte (Section 17) and proceed northeast into Sections 5 and 8. The implementation of Unit J will allow for a reduced fuel area that could be utilized as an anchor point for suppression strategies. In conjunction with past harvest activities, Unit J could be utilized to protect the existing road infrastructure and allow for greater amounts of time to evacuate the upper reaches of the East Fork of Smith Creek.

As a part of the burn plan, a comprehensive site specific “Risk” and “Potential Consequences” analysis is developed, which can be used to help determine overall management risk associated with the project. The “Technical Difficulty” ratings are used to facilitate the planning process and help identify prescribed fire positions and skill levels needed to safely and successfully implement the prescribed fire. The development and approval of a burn plan are the final decision criteria to implementing a prescribed fire unit. Prescribed burn plans cannot be implemented without the final signed approval of the District Ranger and can only be amended at the same level. In addition to the burn plan, the District Ranger/Agency Administrator completes a Go/No-Go Pre-Ignition Approval. This approval evaluates whether compliance requirements, prescribed fire plan elements, and internal and external notifications have been completed and expresses the Administrator’s intent to implement the prescribed fire plan. If ignition of the prescribed fire is not initiated prior to expiration date determined by the Agency Administrator, a new approval is required.

**Table 1-Alternative 3 (Selected Alternative) Treatment Unit Descriptions**

UNIT	ACRES	OBJECTIVE	TREATMENT	REMARKS
<b>A1</b>	52	Promote aspen for wildlife/biodiversity.  Reduce fire severity for public and firefighter safety	Remove 85%-90% of conifers, leave healthy conifers in clumps or individuals (if wind-firm) Remove all conifers within 100’ of aspen clones. Leave tree species preference: 1) DF, 2)LPP, 3)SAF, 4)ES. Leave up to 15 tons/acre down woody material >3” where available	No cutting within 15’ of creek.  Protect ATV trail  Ground based equipment in winter
<b>A2</b>	15	Promote aspen for wildlife/biodiversity.  Reduce fire severity for public and firefighter safety	Within 15’-100’ from creek remove 75% of conifers <=8” dbh. Hand pile and burn. Favor leaving conifers that lean towards creek space 15’ to 20’’ between crowns. Leave deciduous trees Limb leave trees 4’ from the ground	No cutting within 15’ of creek.  Retain older/larger clumps where available. Hand Treatment
<b>B</b>	165	Reduce risk of high severity fire for public/firefighter safety.  Enhance aspen regeneration and meadow integrity.	Irregular thin, 20’-25’ between boles. Favor leaving DF and ES over LPP. Where aspen clones occur, remove all conifers within 100’. Post & pole areas, leave	Protect ATV trail  Retain older/larger clumps of mostly uncut forest when encountered

UNIT	ACRES	OBJECTIVE	TREATMENT	REMARKS
		Lower risk of mtn. pine beetle attack.	all conifers >6" dbh Pile and burn slash Leave up to 15 tons/down woody material >3" where available	Ground-based equipment in winter
<b>C</b>	112	Improve evacuation route for public & firefighter safety.  Enhance aspen regeneration/meadow integrity.	Thin/weed 20'-25' between trees >8" dbh. Trees <8" thin 10'-12' between crowns. Leave a no tree zone (3-5 acres) near junction of Smith Creek Rd and the east entrance to Sec. 6 subdivision (staging area if a wildfire occurs) Where aspen clumps occur, remove all conifers within 100'.	Hand Treatment
<b>D</b>	125	Reduce risk of high severity fire for public/firefighter safety.  Enhance aspen regeneration and meadows.  Lower risk of mtn. pine beetle.	Irregular thin, 20'-25' between boles. Favor leaving DF & S Where aspen clones occur, remove all conifers within 100'. Pile and burn slash Leave up to 15 tons/down woody material >3" where available.	Protect ATV trail  Ground-based equipment in winter
<b>E1</b>	34	Reduce risk of mtn. pine beetle attack.  Restore to a park-like DF stand	Irregular thin, 35' between boles of LP, 50' where large DF dominate. Leave trees in clumps where possible. Leave tree preference: 1)DF, 2)ES, 3)SAF, 4)LPP. Remove LPP killed by mtn. pine beetle. Retain dead DF and/or LP to meet snag guidelines. Whole tree yard W ¼ of the unit adjacent to private. Leave up to 15 tons/acre woody debris >3" dbh where available	Buffer existing spring.  Helicopter log

UNIT	ACRES	OBJECTIVE	TREATMENT	REMARKS
<b>E2</b>	50	<p>Reduce risk of mtn. pine beetle attack.</p> <p>Reduce high severity fire for public/firefighter safety.</p>	<p>Irregular thin, 35' between boles of LP, 50' where large DF dominate.</p> <p>Leave trees in clumps where possible.</p> <p>Leave tree preference: 1)DF, 2)ES, 3)SAF, 4)LPP.</p> <p>Remove LPP killed by mtn. pine beetle.</p> <p>Retain dead DF and/or LP to meet snag guidelines.</p> <p>Feather thinning along private boundary.</p> <p>Leave up to 15 tons/acre woody debris &gt;3" dbh where available</p>	Helicopter log
<b>F</b>	60	<p>Reduce risk of mtn. pine beetle attack.</p> <p>Reduce spread of wildfire increasing firefighter safety.</p>	<p>Species designate to remove all LP in irregular shaped sub-units within larger unit.</p> <p>Leave all species other than LP.</p> <p>Leave up to 15 tons/acre woody debris &gt;3" dbh where available</p>	Helicopter log
<b>G</b>	28	<p>Reduce risk of high severity fire for public/firefighter safety.</p> <p>Enhance aspen regeneration for wildlife/biodiversity.</p>	<p>Remove majority of conifers, Retain aspen &amp; deciduous trees (leave the wet area outside of boundary).</p> <p>Whole tree yard</p> <p>Leave up to 15 tons/down woody material &gt;3 where available.</p>	<p>No cutting within 15' of creek.</p> <p>Ground-based Equipment in winter</p>
<b>H</b>	103	<p>Improve evacuation route for public &amp; fire fighter safety.</p>	<p>Thin 20'-25' between boles. Leave species preference: 1)DF, 2)ES, 3)LPP, 4) SAF. Leave 10-15 tons/down woody material &gt;3". Remove most of &lt;3" dbh slash material. Thin large trees (&gt;15-20"dbh) approx. 35' apart.</p> <p>Handpile and burn. All slash within 100' of road to be removed, burned, and/or piled.</p>	Hand Treatment

UNIT	ACRES	OBJECTIVE	TREATMENT	REMARKS
<b>I</b>	66	Reduce risk of high severity fire for public & firefighter safety.  Reduce risk of mtn. pine beetle attack.	Irregular thin Large trees (DF, LP,ES) thin approx. 35' between boles. Species preference: 1)DF, 2)ES, 3)LPP, 4)SAF. Machine pile and burn. Leave up to 15 tons/down woody material >3" where available.	Ground-based equipment in winter  Harvest contingent on obtaining private access
<b>J</b>	300	Improve wildlife habitat (create open DF stand). Reduce ladder fuels.	Prescribe burn. Create a mosaic pattern of vegetation. Where DF dominates underburn and where LPP/SAF dominates burn passively (mixed severity fire). In openings, burn all conifers.	Leave 100' no burn zone next to Meadow Creek
<b>Total</b>	<b>1110</b>			

### ***Road Maintenance Treatments with Selected Alternative 3***

Road Treatment A, clean-up and blading of system roads utilized for project related activities (Discussed in detail in the EA Table A-24, Map M-6), will occur after harvest-related activities have been completed.

All or additional portions of Road Treatments B and C will also be implemented and will provide benefits to fishery habitat if sufficient funding is available either from receipts generated from the harvested timber and other forest products or through other means. Road Treatments B and C include improvements to Smith Creek Road #991, Goat Mountain Road # 6636, and East Fork Smith Creek Road #6635 to a three season standard including 6" surfacing on residential access roads and 4" spot surfacing on seasonally gated roads (See EA, Table A-24, pp. A-103 through A-109, Map M-6). These options will improve the drivability of roads in the Smith Creek drainage, especially during the spring and fall seasons when the road surfaces are soft. Current conditions (only minor surfacing) make them subject to extreme rutting (See Map M-6).

Special Forest Service funding allocated for road treatment projects became available in 2010-2011 and all portions of Treatments B & C except for the complete surfacing of the roads with 6" of gravel are funded and will be completed by fall 2011. Funded treatments include aquatic passages, culvert replacements, drain dips, armored surfacing of stream crossings, and spot surfacing. These treatments will improve road conditions in the area.

### ***Detailed Stand Treatments - Common to All Units***

Described below are the stand treatments that are common to all units associated with the selected alternative (Alternative 3)

- A. **Aspen** – Remove all conifers within and around aspen clones (individual trees sharing a common root system) for a distance of at least 100 feet. Existing aspen clones will be retained to the extent possible. Fishery mitigation to protect streams (EA, pp. 2-30 & 2-31) will have priority over treating aspen within 15 feet of stream channels. Units A & G have large concentrations of aspen clones and will have the majority of the conifers removed leaving 10-15% of the best formed, healthiest conifers in clumps. Key areas for clump retention will include trailheads, along system roads and ATV trails, wet areas, and viewsheds from adjacent private lands. Fuels resulting from the treatments will be piled and burned at the landings or away from the root systems of the remaining aspen clones. Aspen regeneration monitoring will occur following treatments for several years to determine if measures such as fencing are needed to protect aspen sprouts.
- B. **Fuels** – Merchantable trees will be whole tree yarded and skidded to designated landings for all of the tractor units. The western portion of helicopter Unit E, a shared boundary between the National Forest and private land, (approximately 15 acres) contains existing large downed woody fuels of 15-20 tons acre. Within this area, no additional fuel accumulation will be allowed and all trees cut will be whole tree yarded to a landing for processing. The remaining portions of helicopter units E and F currently contain only light amounts of downed woody fuels. Sub-merchantable materials and slash from logging operations will be piled or removed from all units leaving up to 15 tons/acre of coarse woody debris, where available, on average in each unit for nutrient recycling, favoring larger diameter pieces. Coarse woody material not needed to meet downed woody debris needs will be skidded to a landing, piled and burned, piled and burned on the harvest site, or otherwise removed from the area. Aspen enhancement units A1 & G will not have piles burned adjacent to aspen clones to protect root systems.
- C. **Burning** – Activity fuels will be treated and burned or otherwise removed following harvest except where needed to accomplish downed woody debris/snag standards. Burning methods would include burning hand or mechanical piles, landings, and/or jackpot burning (treatment of concentrated fuels). These actions will reduce ladder and activity fuels within the treated units.
- D. **Tree Densities** –Existing stand densities are highly variable within the units. The number of existing trees per acre varies greatly for each stand and ranges from 100 to 3000 stems per acre. On the average,

approximately 300-500 irregularly spaced trees (of various sizes) per acre will be left. Portions of some of the units may be left untreated to meet a variety of resource objectives. The remaining trees will vary in size from seedlings to mature trees (six inches tall to 80 feet tall). Treatments are designed to reduce ladder fuels (small to mid-story trees and shrubs), thin the overstory to increase the space between crowns, reduce accumulations of down woody materials to levels consistent Forest Plan standards, and create healthier stand conditions.

- E. **Leave Clumps** -Untreated or minimally treated portions of some stands will be left in a natural appearing condition and the trees in these groups will contribute to the total number of trees left per acre. Given these clumps, more than 500 established trees/acre will be left in portions of some units. However, 500 trees/acre is the high-end for fuels objectives for the majority of the units.
- F. **Snags** – Forest Plan standards for snag management will be met throughout the various harvest units with the selected alternative. Commercial harvest Units E and F do not have evidence of past harvest, so retaining adequate numbers of snags will not be problematic. For Units A1, B, D, and G (units having past commercial harvest), snag surveys using fixed area plots of 37'3" radius (1/10th acre plot) were conducted. The standard specifies 30 snags per 10 acres, which equates to 3 snags per acre on average. Following are the average # snags/ acre that were found and will be retained in each of these units:
- Unit A1 - 4 snags/ acre
  - Unit B - 5 snags/ acre
  - Unit D - 4 snags/ acre
  - Unit G - 6 snags/ acre

The remaining units will be hand-thinned, removing mostly small diameter ladder fuels and lower live limbs, so snag numbers will not be affected. A snag provision will be included in the timber contract to ensure that existing snags not currently containing mountain pine or Douglas-fir beetles will be left (pending safety concerns). The harvested units (A1, B, D, and G) will be closed to firewood cutting in order to ensure that snags remain in the treated stands after harvest activities are completed. This closure will remain in effect until monitoring indicates that replacement snags are available.

### ***Mitigation and Monitoring***

Various mitigation measures have been incorporated into my decision to reduce the probability of adverse impacts to resources from implementing Alternative 3. These mitigation measures are described in detail on (pp. 2-30 through 2-39) of the EA.

My decision also incorporates various monitoring methods (EA, pp. 2-40 through 2-42). Monitoring will be conducted and documented by various specialists

and/or their staff. Monitoring results will be used to determine whether objectives are being met. Sampling frequency of the required monitoring will vary somewhat from year to year and is subject to change depending on available monitoring resources and monitoring results.

### **Decision Criteria and Rationale for the Decision**

Based on a comparison of the alternatives with the three criteria described below, my decision was to implement Alternative 3 (Proposed Action & Meadow Creek burn). The criteria were:

- 1) Achievement of the project purpose and need as outlined on page 4 of this document.
- 2) Responsiveness to public comments (Decision Notice, Appendix A) and the environmental issues (EA, pp. 2-4 through 2-9) identified in association with this project.
- 3) Consistency with laws, regulations, and policy as described in detail on (pp. 24-33) of this Decision Notice.

The EA for this project addresses in detail the potential effects of implementing or not implementing a hazardous fuel reduction/vegetation treatment project in the Smith Creek WUI on a variety of National Forest resources for each of the alternatives considered. I conclude from this information that the predicted effects of implementing Alternative 3 are well within acceptable limits. After careful evaluation of the following decision criteria, I strongly believe that Alternative 3 best meets the purpose and need for the project, as well as the overall public interest.

## **1).Achievement of the Purpose and Need**

**Alternative 1 (No Action Alternative)** would not treat the vertical and horizontal continuity of fuel arrangement in the Smith Creek WUI. No actions would be undertaken over the next few years that respond to the purpose and need for the project as identified on p. 4. The opportunity to reduce fuel accumulations would be deferred. These stands would likely increase in susceptibility to lethal wildfire and/or insect and disease outbreaks. Meadows and aspen stands would continue to shrink due to conifer encroachment. Douglas-fir stands would contain high densities of trees thus reducing open park-like habitat on the landscape.

Alternative 1 does not respond to Forest Plan management area direction for Management Area 8 to provide for productive timber stands, optimize growing potential, optimizing sustained timber production and vegetative diversity.

**Alternative 2 (Proposed Action Alternative)** would address and meet much of the purpose and need for the project. This alternative was developed considering the areas of high fuel hazard, high risk of human-caused ignition, and high social values. The proposed action emphasized treating those stands where thinning and reduction of conifer encroachment would improve public and firefighter safety, maintain and/or improve wildlife habitat, enhance aspen regeneration, and those

having existing insect and disease outbreaks. All harvest units associated with the proposed action would be administered as Management Area 8 (timber) with some units having linear inclusions of Management Area 7 (riparian), both of which allow for commercial timber management in the Gallatin Forest Plan.

**Alternative 3 (Selected Alternative)** includes all units and activities associated with Alternative 2 and adds Unit J, which consists of a 300 acre prescribed burn in the Meadow Creek area (See Map 4). Implementation of Unit J will improve wildlife habitat by reducing ladder fuels in open Douglas-fir stands and reduce conifer encroachment, thus increasing the integrity of grassland/park habitats. Unit J will help improve firefighter and public safety in the East Fork of Smith Creek in the event of a wildfire. The Selected Alternative will address and meet all aspects of the purpose and need for the project.

## **2).Responsiveness to Environmental Issues and Public Comments**

In coming to my decision, I considered internally generated issues (Project File, Vol. 2, Chap. 5), public issues (Project File, Vol. 2, Chap. 6), the comments submitted during the scoping phase of this analysis (Project File, Vol. 2, Chap. 3), and those comments submitted during the EA comment period (Appendix A and Project File, Vol. 2, Chap. 4). The Interdisciplinary Team thoroughly studied the various issues and developed a range of alternatives and mitigation measures that addressed the most critical issues (EA, Chapter 2). I reviewed the significant environmental issues listed below and evaluated the implications of each alternative.

**Water Quality:** The water quality analysis is documented in the EA (pp. 3-19 through 3-30) and in the Water Quality and Fishery specialist reports (Project File, Vol. 4, Chapter 11). I thoroughly considered this information and came to the following conclusions:

With the selection of Alternative 1 (No Action Alternative), additional road maintenance and improvements would require outside funding. There would be no increase in road sediment due to Forest Service activities. Special Forest Service funding for road treatments became available to complete several of the road improvements needed in the project area including aquatic passages, culvert replacement, drain dips, and spot surfacing, but further road improvements (complete road surfacing) would not likely be funded. Continuous vertical and horizontal fuel concentrations would remain throughout the WUI and the likelihood of a catastrophic wildfire adversely affecting the riparian areas would continue to increase. Catastrophic wildfire has potential to increase soil erosion, debris flows, and sediment loadings to Smith and Shields Rivers.

With Alternative 2, project activities and Road Treatment A would cause a very slight increase in sediment short term, but long-term sediment reductions would be expected. Several of the Road Treatments B & C (except complete surfacing of roads) were funded from other Forest Service sources and are in the process of implementation (2010-2011). Additional road surfacing would likely be funded

from timber sale receipts, allowing for further reductions in sediment long-term. Continuous vertical and horizontal fuels would be broken up and decreased in the WUI. The likelihood of a catastrophic wildfire adversely affecting the riparian areas would be decreased, also reducing the potential for additional sediment loadings to Smith and Shields Rivers.

With Alternative 3 (Selected Alternative), project activities and Road Treatment A will cause a slight increase in sediment short term, but in the long term, sediment reductions. Several of the Road Treatments B & C (except complete surfacing of roads) were funded from other FS sources and are being implemented (2010-2011). Additional surfacing would likely be funded from timber sale receipts, allowing for further reductions in sediment long-term. Meadow Creek burn will create minor sediment increases short-term. Continuous vertical and horizontal fuels will be broken up and decreased in the WUI. The likelihood of a catastrophic wildfire burning intensely through the riparian areas will be decreased thus reducing the potential for additional sediment loadings to both the Smith and Shields Rivers.

**Fisheries:** The conclusions I made after careful consideration of the effects analyses presented in the EA (pp. 3-31 through 3-52) and in the fisheries specialist report (Project File, Vol. 4, Chap. 11-7) are documented below:

With Alternative 1 (No Action Alternative), no fuel reduction activities would occur along riparian corridors. There would be no fuel reduction related impacts to riparian areas, or fish habitat. Aquatic passages were completed in summer of 2010 from other Forest Service funding sources.

Pre-activity road maintenance treatments (funded with special road maintenance dollars) associated with the projects (Alternatives 2 & 3) will improve drainage and reduce sediment concerns on Smith Creek Road #991, East Fork of Smith Creek Road #6635, and Goat Mountain Road #6636. These treatments were completed in summer 2008 prior to harvest activities. The treatments include improving stream crossings, adding armored drainage dips, reshaping portions of the road prisms and ditches to improve drainage, and spot surfacing of problem areas. The treatments were designed to reduce runoff and the introduction of sediment into the streams.

Aquatic passages were completed in summer of 2010 from other FS funding sources. Implementation of Alternative 2 would likely result in further sediment reductions and improved spawning habitat with the implementation of additional road surfacing. Mitigation (EA, pp. 2-30 & 2-31) ensures no adverse effects on riparian integrity or streambank stability would occur as a result of project implementation.

Alternative 3 (Selected Alternative) will also result in additional sediment reductions and improved spawning habitat due to funding of additional road surfacing treatments. Mitigation (EA, pp. 2-30 & 2-31) ensures no adverse effects on riparian integrity or streambank stability will occur as a result of project implementation.

**Fuels:** The conclusions I made after careful consideration of the effects analyses presented in the EA (pp. 3-52 through 3-63) and in the fuels specialist report (Project File, Vol. 2, Chap. 8-1) are documented below:

With Alternative 1, forested areas within the Smith Creek WUI would continue to follow natural rates of succession, with fuels becoming denser in areas adjacent to private lands. Wind-driven wildfire would be expected to transition quickly from the ground into the forest canopy. Risks to public and firefighter safety from wildfire would be high and would continue to increase over time without treatment of fuels.

Implementation of Alternative 2 (Proposed Action Alternative) would modify the volume and arrangement of fuels within the Smith Creek WUI. Ladder fuels and surface fuel loadings would be reduced adjacent to private lands thus reducing the likelihood of crown wildfire and providing adequate time for public evacuation. Implementation would greatly increase firefighting capabilities and safety in the WUI.

Implementation of Alternative 3 (Selected Alternative) will modify the continuous arrangement of vertical and horizontal fuels within the Smith Creek WUI. Ladder fuels and surface fuel loadings will be reduced by thinning areas adjacent to private lands, thus lowering the chances for a catastrophic crown fire in the area. Crown fire risks to adjacent private land in Section 17 will also be reduced with implementation of the Meadow Creek prescribed burn. Reducing fuels in this unit will open the area and help provide additional time for evacuation along the East Fork of Smith Road in the event of a wildfire. Alternative 3 will increase firefighting capability and safety in the WUI.

**Wildlife Habitat:** The wildlife habitat analysis is documented in the 2007 EA (pp. 3-63 through 3-78), 2008 & 2011 Supplemental EAs, and in the wildlife specialist reports (Project File). I thoroughly considered this information and came to the following conclusions:

Selection of Alternative 1 (No Action Alternative) would not improve wildlife habitat by modifying current forest structure. Meadow habitat, open Douglas-fir stands, and aspen areas would continue to decline or be lost entirely over time. The project area would continue to have a large percentage of area represented by medium age class alpine fir.

Implementation of Alternative 2 (Proposed Action Alternative) would improve habitat for species dependent on non-forested habitat groups (grassland, wet meadow, aspen, willows). The proposed thinning would result in increased foraging opportunities for big game and raptors. Late seral, single story old growth Douglas-fir stands would be increased. The medium age class alpine fir structure would be reduced in the project area. A mosaic of non-forested and forested stand structural stages would be created. Sufficient big game hiding cover will remain post-treatment to meet the Gallatin Forest Plan standard (p. II-18).

Implementation of Alternative 3 (Selected Alternative) will improve habitat for species dependent on non-forested habitat groups (grassland, wet meadow, aspen, willows). The thinning will result in increased foraging opportunities for big game and raptors, as well as nesting habitat for snag dependent birds. Late seral, single story old growth DF stands will be increased. The medium age class alpine fir structure will be reduced in the project area. A mosaic of non-forested and forested stand structural stages will be created. Implementation of Meadow Creek burn will restore additional open Douglas-fir forest. Sufficient big game hiding cover will remain post-treatment to meet the Gallatin Forest Plan standard (p. II-18).

**Insect and Disease:** The insect and disease analysis is documented in the EA (pp. 3-79 through 3-84) and in the vegetation specialist reports (Project File, Vol. 4, Chap. 12-1). I thoroughly considered this information and came to the following conclusions:

Selection of Alternative 1 (No Action Alternative) would maintain the high probability for additional mountain pine beetle mortality in lodgepole pine in the untreated areas immediately adjacent to private lands, thus increasing fuels build-up. Douglas-fir beetle infestations would likely remain at current endemic levels unless an extended drought, large wildfire, or wind event occurs.

Implementation of Alternative 2 (Proposed Action Alternative) would reduce the likelihood for additional mountain pine beetle mortality in the portions of the Smith Creek WUI that are being treated. Thinning will remove the currently infested trees and increase the health and vigor of the remaining trees thus making them more resistant to future mountain pine beetle attacks. Future Douglas-fir beetle infestations would likely decrease slightly in the timber compartment and Project Area due to increased vigor and open spacing of Douglas-fir. There is evidence of past Douglas-fir beetle activity but current infestations are at very low levels

Implementation of Alternative 3 (Selected Alternative) will also reduce the likelihood of additional mountain pine beetle mortality in the portions of the Smith Creek that are being treated, similar to the implementation of Alternative 2. Thinning will increase the health and vigor of the remaining trees. The implementation timing and parameters for the Meadow Creek burn are critical to prevent future Douglas-fir beetle epidemics by preventing the scorching of numerous large Douglas-fir. Scorched trees can become stressed and are more prone to attract Douglas-fir beetles. A site specific burn plan writing process will utilize weather and fire behavior models to determine the most optimal time period (also referred to as a window) the meet the burn objectives with the lowest possible risk of escape. The models area also used to determine rates of spread, crown scorch, and tree mortality.

**Soils:** The soils analysis is documented in the EA (pp. 3-85 through 3-92) and in the soils specialist report (Project File, Vol. 4, Chap. 10-1). I thoroughly considered this information and came to the following conclusions:

Selection of Alternative 1 (No Action Alternative) would have no effect on soil productivity because no ground-disturbing treatments were proposed with this alternative.

Implementation of Alternative 2 (Proposed Action Alternative) would have no long-term detrimental effect on soil productivity due to effective mitigation and restoration practices. All ground-disturbing treatments adhere to Regional Soil Quality standards, including those with previous harvest.

Implementation of Alternative 3 (Selected Alternative) will have no long-term detrimental effect on soil productivity due to effective mitigation and restoration practices. All ground-disturbing treatments adhere to Regional Soil Quality standards, including those with previous harvest. Prescribed burning associated with the Meadow Creek burn unit will be low intensity and will not affect soil productivity.

**Other Issues:** The NEPA provides for identification and elimination from detailed study, those issues that are not significant or which have been covered by prior environmental review, narrowing the discussion of these issues to a brief presentation of why they will not have a significant effect on the human environment or providing a reference to their coverage elsewhere (40CFR 1501.7(3)). While I considered these issues in making my decision, they were either unaffected, mildly affected, or the effects could be adequately mitigated for all of the alternatives. An assessment of each of these issues is provided in the EA (Chapter 2-10 through 2-16 and in Appendix A).

**A. Noxious Weeds**

**B. Livestock Grazing**

**C. Recreation (Includes Trails, Roadless, and Unroaded Areas)**

**D. Visuals**

**E. Wildlife Issues (TES, Sensitive, MIS Species)**

**F. Sensitive Plants**

**G. Old Growth/Vegetative Diversity**

**H. Heritage Resources**

**I. Smoke Emission**

**J. Economic Analysis**

**K. Roads**

### **3).Consistency with Laws, Regulations, and Policy**

Laws, regulations, and policies that pertain to this project include the Gallatin Forest Plan, the Gallatin National Forest Land and Resource Management Plan FEIS (1987); the Gallatin National Forest Travel Plan Decision, Region 1 Soil Standards, 1995 Federal Wildland Fire Management Policy and Program, National Fire Plan 2000, the Endangered Species Act of 1973, Executive Order

11990 (wetlands and floodplain degradation), Executive Order 12898 (Environmental Justice), Federal Noxious Weed Management Act, Forest Service Manual 5150 Fuels Management, Forest Service Manual 2526 Riparian Management, Migratory Bird Act of 1918 (as amended), Multiple Use Sustained Yield Act of 1960, National Environmental Policy Act of 1969 (NEPA) as amended; National Forest Management Act of 1976 (NFMA), National Historic Preservation Act of 1966; State of Montana Water Act of 1974, Clean Water Act of 1977, Clean Air Act of 1963, State of Montana Best Management Practices; Trout Unlimited Settlement Agreement; Land Use Strategy for Westslope and Yellowstone Cutthroat Trout; Cooperative Conservation Agreement for Yellowstone Cutthroat Trout; and Executive Order 12962 (June 1995) Aquatic Resource Protection. More detailed descriptions can be found in Chapter 3 of the EA and in the 2008 and 2011 Supplemental EAs. A comparison of compliance between the three alternatives is summarized below:

Alternative 1 (No Action Alternative) would be consistent with the above-mentioned laws, regulations, and guidelines, however, the majority of the treatment areas lie in Management Area 8 as described in the Gallatin Forest Plan (Chapter III). Management Area 8 goals are to provide for productive timber stands, optimize growing potential, and develop equal distribution of age classes to optimize sustained timber production and improve vegetative diversity. No vegetative treatments would occur in the Smith Creek WUI with selection of Alternative 1 and opportunities to improve vegetative diversity and forest health would be foregone in the immediate future. The 1995 Federal Wildland Management Policy and program's number 1 priority is firefighter and public safety. With Alternative 1, there would be no modification of vertical and horizontal fuel loadings in the Smith Creek WUI, adjacent to private residences and structures.

Alternative 2 (Proposed Action Alternative) would be consistent with all of the above-mentioned laws, regulations, and guidelines. Opportunities associated with goals for Management Area 8 to optimize growing potential, improve forest health, and improve vegetative diversity would be achieved through the various vegetative treatments associated with both of the action alternatives. Implementation would help create a mosaic of non-forested and forested structural stages and would improve wildlife habitat for those species dependent on non-forested habitat types such as grasslands, willows, aspen, and wet meadows as well as maintain adequate forested hiding cover for big game species required by the Gallatin Forest Plan (p. II-18). The 1995 Federal Wildland Management Policy and program's first priority is firefighter and public safety. Treatments associated with Alternative 2 would modify vertical and horizontal fuel loadings in the Smith Creek WUI adjacent to private residences and structures and provide for additional time for evacuation, were a catastrophic wildfire to occur. Compliance with all other laws, regulations, and guidelines would be ensured by applying effective mitigation as outlined on pp. 2-30 through 2-39 of the EA.

Alternative 3 (Selected Alternative) will comply with all laws, regulations, and policies listed above for the same reasons. Effects of vegetative treatments will

be the same as those with implementation of Alternative 2 regarding consistency with laws regulations, and standards.

## **Consistency With Laws, Regulations, and Policies**

### **Gallatin Forest Plan**

#### **Management Area Direction**

The Forest Plan subdivided the forest into 26 management areas (MA's). These areas are described in detail in Chapter 3 of the Forest Plan (FP, pp. III-2 through III-73). Vegetative treatments associated with my decision will occur within three Management Areas (MAs) 7, 8, and 10. The majority of the harvest activity acres associated with my decision fall primarily in Forest Plan Management Area MA8 (timber management). The sections on Management Area Map M-10 that are displayed as MA 99 were previously privately owned and traded to the Forest Service in 1997 with the Goat Creek Land Exchange. These sections have not officially been assigned management areas after the land trade. The interim management direction for these areas is to manage them the same as adjacent areas. Section 1 is the only section containing treatment units that is currently unclassified. The units in Section 1 are adjacent to MA8 on the north, east and south boundaries, so the interim direction would be to treat them as such.

Some of the harvest units include small acreages of narrow linear inclusions of MA7 (riparian). MA7 is suitable for timber harvest as long as the needs for riparian dependent species are met. Standards relative to wildlife and fisheries within these MAs include providing for wildlife and fishery habitat improvement consistent with MA goals and to incorporate considerations for wildlife and fisheries in the project planning process. Improvement of specific wildlife and fishery habitats was integrated into the purpose and need for this project. Detailed analysis was completed to identify and mitigate for any adverse affects. The action alternatives meet these wildlife and fishery standards applicable to MA 8, as well as MA7 (riparian). Standards for Management Areas 7 & 8 applicable to the six significant issues will be met with the implementation of the mitigation measures outlined in the EA pp. 2-30 through 2-39.

The Meadow Creek prescribed burn falls within MA10 (open grasslands interspersed with suitable timberlands). Additional direction can be found in the Forest Plan on (pp. III- 19-25, and 30-31). Specific resource management direction is given in Chapter 1 (pp. 1-12 through 1-13) of the EA. The Meadow Creek burn is consistent with MA10 management direction.

There is nothing in my decision (Alternative 3) that is incompatible with the direction for any of the Management Areas that are found in the Project Area.

## **General Direction**

**Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.2** – Use the Montana Cooperative Elk-Logging Study when evaluating timber sales and road developments in elk habitat. The Gallatin National Forest Travel Management Plan amended the Gallatin National Forest Land and Resource Management Plan (Forest Plan) to remove this direction in October 2006.

**Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.4** – Use the Montana Cooperative Elk-Logging Study for analyzing elk habitat security and conduct [HEI] analysis. The Gallatin National Forest Travel Management Plan amended the Gallatin National Forest Land and Resource Management Plan (Forest Plan) to remove this direction in October 2006.

**Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.3** – Big game winter range will be managed for forage and cover. Winter range is not located within the project area; elk migrate out of National Forest and utilize lower elevation private lands.

**Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.5** – Maintain hiding cover associated with key habitat components over time. Hiding cover was originally estimated at approximately 70-90% of the area and is not limiting. There were no areas of concern identified for big game species for this project. The vegetative structural diversity analysis indicates a 1% decrease in the pole, mature, and old growth structural classes, maintaining acceptable levels of hiding cover. Identified mitigation measures will facilitate fall migration to winter range. The 2011 Supplemental EA (pp. 10-11) specifically addresses project compliance with this standard, finding that there would be 85%-87% hiding cover remaining post-treatment, which is well above the 2/3rds hiding cover required by the Forest Plan standard.

**Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.7** – Standards for snag and down woody material will be followed. Snag habitat needs were considered for Townsend's big-eared bat, flammulated owl, Northern goshawk, pine marten, and migratory birds. Forest Plan standards for snag and down woody debris management will be met under the Selected Alternative. Snag habitat will remain well distributed across the landscape within all forest types. In addition to the mitigation described in the EA (pp.34 & 35), additional measures as described earlier in this document will be implemented.

**Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.8** – Emphasis will be given to the management of special and unique wildlife habitats such as wallows, licks, talus, cliffs, caves, and riparian areas. Key components such as cover, security areas, and road densities will remain unchanged as outlined in the 2008 Supplemental EA. The selected alternative will not result in adverse modification of big game or its associated habitat. Elk population goals have been met for this EMU and are considered to be healthy and widely distributed.

**Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.11** – Roads and forest cover will be managed to provide habitat security and diverse hunting opportunity. A Hillis (Hillis and others 1991) model vulnerability analysis was also conducted for HD315. This indicated that 36% of the hunting district met the Hillis model for elk security cover (30% is recommended). Forest cover is not limiting in this project area and there are no new roads or changes in access. Identified mitigation measures will provide quality bow hunting opportunities to better meet population harvest objectives.

**Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.12** – Habitat that is essential for species identified in the Sensitive species list developed for the Northern Region will be managed to maintain these species. Sensitive species were addressed as part of the analysis for proposed vegetation treatment in the Smith Creek project area. All terrestrial sensitive species were dismissed or analyzed in detail. Mitigation measures were identified as appropriate.

**Forest Plan Standard for Wildlife and Fish, page II-18, section 6.a.13** – Indicator species will be monitored. Indicator species were identified and addressed as part of the analysis for proposed vegetation treatment in the Smith Creek project area. Mitigation measures were identified as appropriate.

**Forest Plan Standard for Threatened and Endangered Species, page II-18, section 6.b.all.** - Threatened and endangered species were addressed as part of the analysis for proposed vegetation and stewardship treatments.

**Forest Plan Standards for Grazing (p. II-20).** - The main guideline applicable to this project is: “Structural and nonstructural improvements to increase forage production will be planned and scheduled through the allotment management process”. Forest Plan Standard for Vegetative Diversity, page II-18, section 6.c.1 – Forest lands and other vegetative communities such as grassland, aspen, willow, sagebrush, and whitebark pine will be managed by prescribed fire and other methods to produce and maintain the desired vegetative conditions. My decision includes vegetative treatments and prescribed fire treatments that will enhance vegetative diversity for these vegetative communities.

**Forest Plan Standard for Recreation, page. II-1** - Provide for a broad spectrum of recreation opportunities in a variety of Forest settings. The Forest Plan recognizes objectives for recreation settings by incorporating the Recreation Opportunity Spectrum (ROS), which provides a framework for stratifying and defining classes of outdoor recreation environments, activities, and experience opportunities (FP, pg. II-2). Furthermore, the Plan specifically identifies as objectives activities that will be managed 1) to provide for users’ safety, 2) that existing recreational hunting opportunities will be maintained, 3) that recreation trails will provide safe public access, and 4) to continue the cabin rental program (FP, pg. II-2-3). Alternative 3 will comply with this direction provided by the Gallatin Forest Plan.

**Forest Plan Direction for Visual Resource, page II-1** - Provide visitors with visually appealing scenery. Forest Plan Visual Quality Objectives (VQOs) are a blending of the results from the VMS Inventory and other resource considerations. The VQOs serve as the Forest Plan standards for visual quality that provide large-scale guidance for the degree of acceptable landscape change for all management initiated landscape-altering activities (FP, pg. II-16). The five VQOs that are assigned to specific land polygons in the Forest Plan are Preservation, Retention, Partial Retention, Modification, and Maximum Modification. Within the Smith Creek project area, the Forest Plan VQOs of Retention and Modification apply. The definitions of these VQOs are shown on page VI-44 of the Gallatin National Forest Plan. By implementation of the mitigation and design criteria outlined in the EA on pp. 2-36 & 2-37, my decision will meet Forest Plan standards for visual quality.

**Forest Plan Direction for Air Quality in Forest Wide Standards, page II-23-**.Require the Forest to cooperate with the Montana Air Quality Bureau (now DEQ) in the SIP and smoke management plan. By limiting the timing, quantity, and intensity of the burning activities as described in the EA Chapter 2 (mitigation), my decision will comply with the air quality laws, guidelines and standards.

### **The Gallatin National Forest Land and Resource Management Plan (1987)**

My decision tiers to the Final Environmental Impact Statement (FEIS) and Land and Resource Management Plan (Forest Plan) for the Gallatin National Forest (USDA Forest Service 1987 PF 206 & 206(a)). The Forest Plan provides direction for all resource management programs, practices, uses, and protection measures for the Gallatin National Forest.

### **Gallatin Forest Travel Plan Direction**

There are no applicable travel plan standards for wildlife, water quality, and/or fisheries. There are no new roads, reconditioned roads, or changes in the road and/or trail system included in this project. Open road densities will remain the same. From a wildlife, water quality, and fisheries perspective, the project will be consistent with our Travel Plan direction.

## **Regional Issues**

### **Region 1 Soil Guidelines**

Region 1 soil guidelines should be met for all units associated with my decision if the soil protection BMPs are used and the specified restoration practices are carried out. Therefore, there will be no cumulative effects to soil quality or productivity. Alternative 3 is consistent with the Soil Quality Standards as applied to cumulative effects and to the Forest Plan in terms of protecting soil productivity.

## National Fire Plan Direction

### 1995 Federal Wildlife Management Policy and Program

The 1995 Federal Wildland Fire Management Policy and Program contains guiding principles that support my decision regarding the Smith Creek Vegetation Treatment Project:

- 1) **Firefighter and public safety is the first priority in every fire management activity.** One purpose and need of the Smith Creek Vegetation Treatment Project is to improve firefighter and public safety, modifying fire behavior by changing the fuels environment in the portions of the WUI that are the closest to residences and other structures. The modification of fuels will provide safer conditions in the event of a large wildfire event.
- 2) **The role of wildland fire as an essential ecological process and natural agent have been incorporated into the planning process.** Treating the Smith Creek WUI will reduce the current level of risk, allowing the possibility of future wildland fires to play an ecological role under certain conditions.
- 3) **Fire management plans, programs, and activities support land and resource management plans and their importance.** The Smith Creek project is consistent with the Federal Wildland Fire Management Policy and the Gallatin National Forest Fire Management Plan.
- 4) **Sound risk management is the foundation for all fire management activities.** The Smith Creek Vegetation Treatment Project, specifically Unit G, analyzes the risk to the public and firefighter communities associated with the Selected Alternative by comparing the resulting fuel conditions associated with management activities versus "no action", as related to fire behavior.
- 5) **Fire management programs and activities are economically viable, based upon values to be protected, costs, and land and resource management objectives.** With the Smith Creek Vegetation Treatment Project, the overriding value at risk is the safety of the public and firefighters. A cash-flow analysis included in Appendix A to this document supports the conclusion the anticipated return from the sale of wood products will exceed the total cost of the activities needed to realize the mandatory post-treatment activities and that funds will likely be available to achieve some of the optional ecosystem restoration items such as additional road maintenance, possible aspen fencing, further road reclamations, and a toilet at the ATV parking area.
- 6) **Fire management plans must be based on the best available science.** The Smith Creek Vegetation Treatment Project has incorporated the latest science and modeling techniques for fire behavior prediction and the

effectiveness of fuels treatments. These techniques include Forest Vegetation Simulation -Fire/Fuel Effects Extension (FVS-FFE), NEXUS, and BEHAVE (See p. 2-7 Issue Indicator for a description of these modeling techniques).

- 7) **Fire management plans and activities incorporate public health and environmental quality considerations.** The Smith Creek Vegetation Treatment Project addresses the need for increasing public and firefighter safety in the event of a large fire event. Smoke management, recreational values, and the impacts of fuels treatments on wildlife, fish, noxious weeds, soils, and visuals are also addressed in the document.
- 8) **Federal, Tribal, State and local interagency coordination and cooperation are essential.** Coordination and cooperation for the project included local consultation with the Park and Meagher County officials including county commissioners, fire, and law enforcement; and the Northern Rocky Mountain Resource Conservation and Development Council (RC&D). Federal cooperation and consultation includes State and Federal Private Forestry groups and the Crow tribal government.

### **National Fire Plan 2000**

The National Fire Plan 2000 states "Assign the highest priority for hazardous fuels reduction to communities at risk, readily accessible municipal watersheds, threatened and endangered species habitat, and/or other important local features, where current conditions favor uncharacteristically intense fires". The analysis area for the project has been identified by the Park County CWPP as a WUI that is at high risk for catastrophic wildfire. The actual treatment units associated with my decision are located in the portions of the Smith Creek WUI that are in the closest proximity to residences, other structures, and primary transportation routes.

## **Other Laws and Legal Requirements**

My decision adheres to all of the following legal requirements:

### **Endangered Species Act (ESA) of 1973**

Under Section 7 of the Endangered Species Act, each Federal agency must ensure that any action authorized, funded or carried out is not likely to jeopardize the continued existence of any threatened or endangered species. My decision to implement Alternative 3 is "not likely to jeopardize" the gray wolf. There are no plants listed as threatened or endangered in the project area. No concurrence is needed from the US Fish and Wildlife Service for the 10J rule non-essential experimental species (gray wolf). No analysis was needed for grizzly bear in the Crazy Mountain Range, north of I-90 because the project area is not located within a Bear Management Unit in the Recovery Plan or in occupied habitat. This species was not further addressed. An analysis of effects on lynx was conducted for this project and included in the Environmental Assessment wildlife report;

conservation measures in the LCAS (Ruediger and others 2000) and the interagency Conservation Agreement (USDA and USDI 2005, USDA and USDI 2006) were used to assess effects. These conservation measures are more conservative than the recent Northern Rockies Lynx Amendment (NRLA), which does allow vegetation treatment projects within WUI areas with fuel treatment objectives. The NRLA management direction applies to mapped lynx habitat presently occupied. The Smith Creek project area is considered to be unoccupied. The USFWS list for the Gallatin Forest lists lynx occurring south of I-90 only. To meet the terms and conditions of the Biological Opinion of the USFWS for the NRLA, the Gallatin began conducting surveys for lynx in the Crazy Mountains in 2010 and will complete this work in 2011. If the Crazy Mountains are found to be occupied, the NRLA direction would then be applied. Consultation with the USFWS is not required for projects in “unoccupied” habitat.

### **Executive Order 11990**

Executive Order 11990 requires Federal Agencies to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands when carrying out their responsibilities. No floodplains or small wetland areas will be lost or degraded by implementing my decision

### **Executive Order 12898 – Environmental Justice**

Executive Order 12898 directs each Federal agency to make achievement of environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. The actions taken with my decision will not adversely affect any disadvantaged or minority groups because of the project area’s distance from large population centers and the diffuse level of adverse impacts on any social group. A project such as this will not produce hazardous waste or conditions that might affect human populations.

### **Federal Noxious Weed Act of 1974 (as Amended) and Executive Order 13112**

Control of noxious weeds is required by The Federal Noxious Weed Act of 1974, and by Executive Order 13112, Invasive Species, February 3, 1999. Also, the Gallatin Forest Plan (page II-28) requires the Forest to “confine present infestations and prevent establishing new areas of noxious weeds. Funding for weed control on disturbed sites will be provided by the resource which causes the disturbance.” My decision to implement Alternative 3 will comply with these laws, regulations, policy and Forest Plan direction. Funding for weed control will come from the value of the timber harvested in conjunction with this project (See EA, Appendix A, Upland Vegetation, pp. A-1 through A-10).

### **Forest Service Manual (FSM 5150) Fuel Management**

The objective of FSM 5150.2 is to identify, develop, and maintain fuel profiles that contribute to the most cost-efficient fire protection and use program in

support of land and resource management direction in the forest plan. My decision will create a fuel profile that is safer for the public and firefighters. In doing so, fires will be less difficult to control and fire protection will be more cost-efficient.

The policy associated with FSM 5150.3 is to integrate fuel management and fire management programs in support of resource management objectives. Several resource management objectives will be met with the project as well as meeting the fuel management objectives.

### **Forest Service Manual (FSM) 2526 Riparian Area Management**

Riparian ecosystems are defined as a transition area between the aquatic ecosystem and the adjacent terrestrial ecosystem; identified by soil characteristics or distinctive vegetation communities that require free or unbound water. For the Smith Creek Vegetation Treatment Project, the Selected Alternative was designed to comply with Forest Service Manual 2526 objectives and policy.

### **Migratory Bird Treaty Act of 1918, as Amended**

On January 10, 2001, President Clinton signed an Executive Order outlining responsibilities of federal agencies to protect migratory birds. On January 17, 2001, the USDA Forest Service and the USDI Fish and Wildlife Service signed a Memorandum of Understanding to complement the Executive Order. Upon review of the information regarding neotropical migratory birds in the wildlife report and project file, the vegetation and stewardship treatments will not result in a loss of migratory bird habitat or be an extirpation threat to any migratory birds.

### **Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C 528)**

The Multiple Use Sustained Yield Act of 1960 states "it is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes". My decision to implement Alternative 3 will be in compliance with this act and will provide for continued opportunities for the above-mentioned resource areas into the future.

### **National Environmental Policy Act of 1969, as amended (NEPA)**

The National Environmental Policy Act (NEPA) of 1969 requires an assessment of the impacts of human activities upon the environment. NEPA establishes the format and content requirements of environmental analysis and documentation. The entire process of preparing this EA was undertaken to comply with NEPA.

### **National Forest Management Act of 1976 (NFMA)**

The National Forest Management Act (NFMA) requires that Forest Plans "preserve and enhance the diversity of plant and animal communities...so that it is at least as great as that which can be expected in the natural forest" (36 CFR 219.27). Furthermore, implementation regulations for the NFMA specify that,

"Fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area".

There are currently 11 terrestrial species identified as "Sensitive" that are known or suspected to occur on the Gallatin National Forest (USDA 2004). With the implementation of the action alternatives, vegetation and stewardship treatments will have "no impact" on peregrine falcon, trumpeter swan, harlequin duck, and black-backed woodpecker. The determination for flammulated owl, Townsend big-eared bat, and wolverine for the action alternatives will be "may impact individuals or habitat, but will not likely contribute to a trend toward federal listing or cause a loss of viability to the population or species".

Three new species were added to the Regional Forester's sensitive species list, effective May 27, 2011. These include the long-eared myotis, long-legged myotis, and the bighorn sheep. Additional consideration was given to these species (BE, Project File). Conclusions indicate "No Impact" (NI) for bighorn sheep because there is no suitable habitat in the project area, and "May Impact Individuals or Habitat (MIH), but will not likely contribute towards Federal listing or cause a loss of viability to the population or species" for the long-eared myotis and the long-legged myotis. Mature canopy cover providing potential roosting areas will be reduced somewhat by thinning, cave habitat has not been found in the project area, and there would be no net change in riparian foraging habitat due to project design and mitigation.

There will be "no impact" on the bald eagle, which was recently designated as sensitive due to their delisting under the Endangered Species Act. The bald eagle was addressed as "threatened" in the 2007 EA and the alternatives were found to have "no effect" as the project will not affect nesting or foraging habitat.

The three fish and amphibian species that have potential habitat in the analysis area were analyzed in the EA (pp. A-32 & A-33). Implementation of the Smith Creek Project Alternative 3 will have "no impact" or will result in a "beneficial impact" to aquatic/ riparian habitat when any or all of Road Treatments B and or C are able to be funded and implemented. Surveys for western toads and northern leopard frogs suggest that they are not present in the project area. Habitat degradation is not likely to occur for these species because little riparian disturbance will occur as a result of the project.

There will be "no impact" to sensitive plants within the treatment areas due to lack of potential suitable habitat or absence of plants based on completed surveys.

#### **National Historic Preservation Act of 1966 (NHPA)**

The Forest Service is mandated to comply with the National Historic Preservation Act (as amended 1993) [Public Law 89-665], (26CFR800.1) on such undertakings that affect properties included in or eligible for inclusion to the National Register of Historic Places (NRHP). NRHP eligible sites affected by an undertaking must either be protected in-place or adverse impacts must be mitigated. My decision to implement Alternative 3 will comply with the National Historic Preservation Act (See EA, pp.A-82 through A-84).

### **The State of Montana Water Quality Act (1969, 1975, 1993, 1996)**

The State of Montana Water Quality Act requires the state to protect, maintain, and improve the quality of water for a variety of beneficial uses. Section 75-5-101, MCA established water quality standards based on beneficial uses. The Montana Department of Environmental Quality has designated all non-wilderness surface waters in the project area as B1 Classification. Waters classified as B1 must be suitable for drinking, culinary, and food processing purposes after conventional treatment; bathing, swimming and recreation; growth and propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply. A 5 NTU turbidity increase above naturally occurring turbidity is allowed in B1 waters. My decision is in compliance with the Montana Water Quality Act and Administrative Rules of Montana, State of Montana Best Management Practices, WQLS/TMDL constraints, as well as Gallatin NF Forest Plan direction for water quality protection. Sediment modeling indicates that project sediment changes are immeasurable and well within the Gallatin NF sediment guidelines.

### **Clean Water Act of 1977**

The objective of this act is to restore and maintain the integrity of the nation's waters. This objective translates into two fundamental goals: (1) eliminate the discharge of pollutants into the nation's waters; and (2) achieve water quality levels that are fishable and swimmable. This act establishes a non-degradation policy for all federally proposed projects.

As a result of the August 17, 2010 NEDC v. Brown 9th Circuit Court Decision, stormwater discharge permits may be required on timber harvest and transport projects where "Industrial" harvest is to take place. An En Banc review has been requested on this Decision and until it is either denied or the review is completed, the Decision does not specifically apply to Montana projects. In light of the uncertainty as to what legal requirements will be needed for compliance with the Decision, the roads associated with the project were examined in detail in a hydrology/engineering review on October 7, 2010 in order to gather the appropriate data and information that could potentially be needed for industrial storm water NPDES permit applications. The road system that would be used for the Smith Creek Vegetation Treatment Project to the GNF Forest boundary has been updated in recent years with aquatic passage culverts, road surfacing, and additional drainage and all could readily be mitigated or disconnected with small sediment traps in order to avoid direct "point source" discharges if necessary. Any required water quality permits would be acquired by the Gallatin National Forest prior to ground disturbance activities for the Smith Creek project. If stormwater discharge NPDES permits are required for the Smith Creek project, the Gallatin National Forest will work with the Montana DEQ to obtain the permits prior to project implementation.

My decision will assure continued compliance with the Clean Water Act, which provides overall direction for protection of water from both point and non-point sources of water pollution (see EA, pp. 3-19 through 3-30).

### **Clean Air Act of 1963**

Congress passed the Clean Air Act in 1963, and amended it in 1972, 1977, and 1990. The purpose of the act is to protect and enhance air quality while ensuring the protection of public health and welfare. The act established National Ambient Air Quality Standards (NAAQS), which must be met by state and federal agencies, and private industry. The Montana DEQ is currently cooperating with the Western Regional Air Partnership (WRAP) to establish visibility goals, monitoring plans, and control measures to comply with regional haze visibility standards in all Montana Class I areas including Yellowstone National Park. The Gallatin NF Forest Plan in Forest Wide Standards pp. II-23 requires that the Forest will cooperate with the Montana Air Quality Bureau (now DEQ) in the SIP and smoke management plan. By limiting the timing, quantity, and intensity of the burning activities as described in the EA Chapter 2 (mitigation), Alternative 3 will comply with the air quality laws, guidelines and standards.

### **Trout Unlimited Settlement Agreement**

The goals, policies and objectives for aquatic resources outlined in the Forest Plan have been further defined within an agreement with the Madison-Gallatin Chapter of Trout Unlimited (TU) in 1990. The intent of the Agreement was to provide more specific direction on timber harvest in riparian areas. Design features and mitigation have been incorporated into the Smith Creek Project to assure that all alternatives adhere to the TU Settlement Agreement (See EA, pp. 2-30 through 2-31).

### **Land Use Strategy for WCT and YCT**

The Upper Missouri Short Term Strategy for Conserving Westslope Cutthroat Trout (UMWCT short term strategy) was finalized into a “Land Use Strategy” in April 2001. During the March 21st, 2002, GLT meeting, a decision was made to apply the finalized Land Use Strategy for implementing the 1999 MOU and Conservation Agreement for WCT in Montana to YCT populations on the Gallatin National Forest. The Strategy calls for preventing habitat degradation and improving existing populations and their habitat until a long-term recovery strategy can be established and implemented. The Strategy ensures that land-use activities, like timber sales, will be implemented in a manner that results in a “beneficial impact” or “no impact” biological decision. The habitat management guidelines outlined in the TU Settlement Agreement (i.e., manage habitats at a level of at least 90% of their inherent potential) serve as the reference level associated with impact determinations.

Implementation of the Smith Creek Project Alternatives 3 will have “no impact” or will result in a “beneficial impact” in aquatic/ riparian habitat after any or all of Road Treatments B and or C are implemented.

**Cooperative Conservation Agreement for Yellowstone Cutthroat trout within Montana.**

In 1998, the Gallatin and Custer National Forests joined numerous other agencies and the Crow Tribe in forming the Cooperative Conservation Agreement for Yellowstone Cutthroat Trout within the state of Montana. This agreement establishes a framework of cooperation between the participating parties to work together for the conservation of YCT. The primary goal of the Agreement and accompanying Yellowstone Cutthroat Trout Conservation program is to ensure the persistence of the Yellowstone cutthroat trout subspecies within the historic range in Montana at levels and under conditions that provide protection and maintenance of both the intrinsic and recreational values associated with the subspecies. A commitment identified in the Agreement that is most relevant to my decision is “modify land uses to provide the greatest degree of habitat and population protection”. Habitat and populations of Yellowstone cutthroat trout will be protected with implementation of Alternative 3.

**Executive Order 12962 (June 1995)**

Section 1. Federal Agencies shall, to the extent permitted by law and where practicable, and in cooperation with States and Tribes, improve the quantity, function, sustainable productivity, and distribution of U.S. aquatic resources for increased recreational fishing opportunities. Implementation of Alternative 3 will help to restore water quality and habitat degradation for fisheries by improving key roads in the project area that serve as sediment sources.

## **Revised Finding of No Significant Impact (40 CFR 1508.27)**

I have reviewed the direct, indirect and cumulative effects of the proposed activities and alternatives documented in the Environmental Assessment (EA) and the information provided with the Supplemental EA (including public comments, and Forest Service responses) for the Smith Creek Vegetation Treatment Project and determined that these actions will not have significant impacts on the quality of the human environment. Thus, an environmental impact statement will not be prepared. The implementing regulations for NEPA at 40 CFR 1508.27 provide criteria for determining the significance of effects. This provision requires consideration of both the context and intensity of predicted effects in determining significance. I based my finding on the following:

**Context** - I have determined that the appropriate context for weighing the significance of impacts was within the general vicinity of the project area including the Smith Creek watershed. I came to this conclusion because the disclosure of effects in the EA found the actions limited in context. The project area is limited in size and the activities limited in duration. Effects are local in nature and will not affect resources at a regional or national scale.

**Intensity** - In accordance with 40 CFR 1508.27(b) my determination that the severity of impacts were not significant was based on consideration of the following 10 factors. Additional information provided through the mapping and analysis of key habitat components for elk in the Supplemental EA, as required by Judge Molloy's October 30, 2008 Court Order, did not change my determination as follows:

### **1) Impacts that may be both beneficial and adverse.**

With application of the required mitigation outlined in the EA (pp. 2-30 through 2-39), there will be no significant adverse impacts to resources associated with this decision (EA, Chapter 3, p. 3-14 through 3-16). Elk hiding cover and key habitat components were mapped and re-evaluated in two Supplemental EAs (2008, 2011). Further analysis confirmed that wildlife issues associated with the implementation of project-related actions were not significant and would be in compliance with Forest Plan standards (p. II-18). Even though forested areas will be thinned and wood fiber removed, these resources will recover within a relatively short timeframe.

Implementation of the Selected Alternative (Alternative 3) would include a combination of mechanical and hand thinning on up to 800 acres of densely stocked National Forest System lands. Slash and landing piles will be burned in accordance with Montana Air Quality Standards (EA, pp. A-85 through A-90). Prescribed burning will be utilized to selectively thin approximately 300 acres that lie within the Smith Creek WUI. A site specific burn plan writing

process utilizing weather and fire behavior models to determine the most optimal time period (also referred to as a window) the meet the burn objectives with the lowest possible risk of escape will be incorporated. As a part of the burn plan, a comprehensive site specific "Risk" and "Potential Consequences" analysis will be developed. The "Risk" and "Potential Consequences" ratings are used to determine an overall management risk associated with the project.

Alternative 3 has been designed to be responsive to the effects of thinning, pile burning, and prescribed burning on the various resources present within the analysis area boundaries. By applying the mitigation outlined in the EA (pp. 2-30 through 2-39), there will be no significant adverse impacts to resources associated with this decision (EA, Chapter 3, p. 3-14 through 3-16). Additional beneficial effects will result from the implementation of Alternative 3 for public and firefighter safety, certain wildlife habitats, and for Yellowstone cutthroat trout.

**2) The degree to which the action affects public health or safety.**

The selected alternative is consistent with the Park County Community Wildfire Protection Plan which was approved in January of 2007. Implementation of the selected alternative would not create significant negative effects to public health and safety (air quality, water quality, recreation, special uses, transportation) due to the use of effective project design and mitigation measures as described in the EA (pp. 2-30 through 2-38). No new information included in the Supplemental EA changed my opinion or led me to believe that there would be significant effects to public health or safety. Project implementation would actually improve public health and safety by breaking up the continuous vertical and horizontal fuels, thus reducing the probability of a catastrophic crown fire in the WUI. The vegetation treatments were designed to reduce fuels along the main evacuation routes in the WUI, which would also improve public and firefighter safety.

**3) Unique characteristics of the geographic area.**

The Project Area is located on the west side of the Crazy Mountains along the northeast corner of the Livingston Ranger District; approximately 35 miles north of Livingston, Montana in the Smith Creek drainage. The Park County Community Wildfire Protection Plan (Project File), completed in spring of 2006, identified the Smith Creek drainage as a wildland urban interface (WUI) that is at risk from potential wildfire.

The section of the Crazy Mountains where this fuels reduction project is proposed offers scenery that is typical of many mountainous areas in Montana. In the viewsheds specific to this project, there are some visually scenic topographic landmarks, such as Goat Mountain, Scab Rock and Bear Mountain. Dense conifer stands cover the flat and rolling terrain, intermittently broken by open meadows and some talus slopes on ridges. There are infrequent stands of deciduous trees such as aspen or cottonwood,

especially in wetter areas and along the streams that add visual interest and variety.

Smith Creek and the East Fork of Smith Creek flow through the project area. There would be no significant effects to wilderness or inventoried roadless areas as discussed in the EA, (Appendix A, Section D-Recreation, pp. A-14 through A-24). There are no Wild & Scenic Rivers or ecologically critical areas known to occur within the analysis area boundaries. Information provided in the Supplemental EA showed no additional unique characteristics to be present in the project area. From the analysis completed, I conclude that there are no unique characteristics of the geographic area that will be affected by this decision.

**4) The degree to which the effects of the decision on the quality of the human environment are likely to be controversial.**

Observations of past thinning and prescribed burning on the Gallatin National Forest lead me to conclude that the effects of this decision are likely to be predictable and consistent with the conclusions reached in both the EA and the Supplemental EA. There is no professional or scientific disagreement on the scope and effects of the selected alternative on the various resources. For these reasons, I conclude that there is not likely to be significant controversy over the degree to which this decision affects the quality of the human environment.

**5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.**

The reasonably foreseeable cumulative effects associated with this decision are detailed in the EA (Chapter 3 and Appendix A) for the various resources that could be affected by the project. Effects to big game were re-evaluated in the 2008 & 2011 Supplemental EAs by analyzing project impacts to elk hiding cover over time and key habitat components. It was determined that wildlife issues associated with the implementation of the proposed actions were not significant and hiding cover will be maintained in compliance with the Forest Plan standard (p. II-18). From these analyses, I conclude that neither the effects of this decision itself, nor cumulative or linked effects of past, current, or reasonably foreseeable future actions appear likely to lead to any significant cumulative impacts.

Effects of thinning in Wildland Urban Interface areas have been documented and monitored nationwide (An Assessment of Fuel Treatment Effects on Fire Behavior, Suppression, Effectiveness, and Structure Ignition on the Angora Fire, August 2007, Project File Vol. 2, Doc. 8-12). Thinning of various size classes of forested stands on the Gallatin National Forest has occurred for the past four decades with results that have been relatively consistent and predictable. Historically, prescribed fire has been utilized by all Federal land management agencies for a multitude of resource objectives such as: brush disposal, wildlife habitat enhancement, slash disposal, etc. The past year alone, Federal land management agencies successfully completed 22,878

prescribed burns totaling 2,856,939 acres. The Forest Service accounted for a little less than half of the total National Forest System lands treated (1,151,095 acres), none of which resulted in escaped fire situations. The Meadow Creek burn plan writing process would utilize weather and fire behavior models to determine the most optimal time period (also referred to as a window) to meet the burn objectives with the lowest possible risk of escape. The models are also used to determine rates of spread, crown scorch, and tree mortality. This information is utilized to determine the number of ignition and holding personnel required to ensure the unit does not escape its boundaries. The prescribed burn would underburn the existing stands with low intensities and moderate severity. Prescribed fire techniques would utilize fire's natural nutrient recycling mechanism and ecological processes, which would better protect the stands against a future catastrophic wildfire that could result in total deforestation. The information provided in the EA and Supplemental EA support my conclusion that actions proposed under my decision have been used in the past and have proven effective. For these reasons, I conclude this decision will not present highly uncertain, unique, or unknown risks.

**6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.**

My decision to thin and allow prescribed burning to reduce fuels in the Smith Creek Wildland Urban Interface as outlined in the EA and Supplemental EAs is project specific. The actions associated with project implementation will be monitored and success in achieving the Purpose and Need for the project will be assessed. Although successful implementation of the project could lead to future projects on the Forest that are similar in nature, I do not foresee that this decision establishes a precedent for any other future actions, nor does it represent a decision in principle about any other future consideration.

**7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.**

The reasonably foreseeable cumulative effects associated with this decision are detailed in the EA (Chapter 3 and Appendix A) for the various resources that could be affected by the project. Effects to big game were re-evaluated in the 2008 & 2011 Supplemental EAs by analyzing project impacts to elk hiding cover overtime and key habitat components. It was determined that wildlife issues associated with the implementation of the proposed actions were not significant and hiding cover and habitat components will be maintained in accordance with the Gallatin Forest Plan standard (p. II-18). From these analyses, I conclude that neither the effects of this decision itself, nor cumulative or linked effects of past, current, or reasonably foreseeable future actions appear likely to lead to significant cumulative impacts.

**8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in, or eligible for listing in, the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources.**

There is one historic site that has been found in the Smith Creek project area. Prehistoric sites are rare in the lower elevations of the Crazy Mountains with most prehistoric sites occurring at high prominences. Several sites have been recorded in the drainage but not near the treatment units. There is potential for historic sites related to early sheepherding, homesteading, and logging operations, but none have been documented.

The design measures associated with the action alternatives for site protections (EA, p. 2-39) can easily be implemented so that no direct or indirect affects would result from the treatments prescribed in the units. See EA, (Appendix A, Section I, pp. A-82 thru A-84) for further details. In addition, there is nothing in the Supplemental EA that would give reason to believe that the project would cause loss or destruction to any scientific, cultural, or historic resources.

**9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.**

My decision to proceed with implementation of Alternative 3 would not adversely affect any endangered or threatened species or their habitat. It was not necessary to prepare a Biological Assessment for this project because the bald eagle has been de-listed (See USFWS Threatened, Endangered, and Candidate Species for the Gallatin National Forest 11/5/07); the project area is outside of grizzly bear habitat, and there was a "not likely to jeopardize" determination for the experimental, non-essential gray wolf. No concurrence is needed from the US Fish and Wildlife Service for the 10J rule non-essential experimental species gray wolf. An analysis of effects on lynx was conducted for this project and included in the Environmental Assessment wildlife report; conservation measures in the LCAS (Ruediger and others 2000) and the Interagency Conservation Agreement (USDA and USDI 2005, USDA and USDI 2006) were used to assess effects. These conservation measures are more conservative than the recent Northern Rockies Lynx Amendment which does allow vegetation treatment projects within WUI areas with fuel treatment objectives. Regardless, the US Fish & Wildlife Service removed the threatened Canada lynx from their list of species that may be present on the Gallatin Forest north of I-90. Consultation with the USFWS is not required for projects in "unoccupied" habitat.

There are no plants listed as threatened or endangered in the project area. Also see consistency with Endangered Species Act of 1973 (p. 28). Because the Supplemental EA was narrow in scope, concentrating on mapping key habitat components for elk, information displayed in the supplement gave me no reason to believe that there would be adverse effects to any T&E species.

**10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.**

Effects to elk were re-evaluated by analyzing project impacts to elk hiding cover over time. I find my decision to fully comply with applicable laws and

regulations. Further, my decision is consistent with the Gallatin Forest Plan standards for wildlife (p. II-17 through II-19) and applicable Management Area direction for the project area.

Applicable laws, regulations, and Forest Plan direction related to my decision are discussed in the EA by resource in Chapter 3 and Appendix A, in the Supplemental EAs (2008 & 2011), and in the Decision Notice (pp. 24-33). Court Order CV 08-92-M-DWM from the US District Court of Montana, Missoula Division cited on page 12 "The Forest Service complied with the Forest Plan and did not violate NFMA and NEPA, with exception of the requirement to map key habitat components for elk". A Supplemental EA was prepared and sent to interested parties. Effects to elk were re-evaluated by analyzing project impacts to elk hiding cover associated with key habitat components. The District Court issued an Order (CV-00092) and final judgment in favor of the Forest Service regarding the project, stating that the Forest Service had complied with the terms of the Court's Order requiring the agency to map the "key components" of elk habitat.

The District Court Order was appealed to the 9<sup>th</sup> Circuit Court. Upon hearing the case, a Court opinion (Case 09-35896) was issued from the 9th Circuit Court of Appeals citing (pp. 14188-14189) "We therefore conclude that the Service has violated the Gallatin Plan, and NFMA, by not ensuring that the Project complies with the current Gallatin Plan elk-cover requirement. We remand to the Service to remedy this error". Additional field data was collected and analysis conducted, verifying that the project would be in compliance with the Gallatin Forest Plan hiding cover standard (II-18). A Second Supplemental EA was released to the public in January 2011 to document the findings and address compliance of the project with the Gallatin Forest Plan.

## **Implementation**

Implementation of my decision to reduce hazardous fuels and conduct vegetation treatments under the conditions of Alternative 3 of the Smith Creek Vegetation Treatment Project will likely begin in the fall/winter of 2011-2012 and could continue for up to four years.

## **Appeal Opportunities**

In accordance with 36 CFR 215.11(b) this affirmation of my original December 2007 decision for the Smith Creek Vegetation Treatment Project is not subject to administrative appeal. The above regulation provides for appeals of a new Decision Notice after revision of an EA, pursuant to FSH 1909.15, Chapter 10, Section 18, "However, only that portion of the decision that is changed is subject to appeal". I have thoroughly reviewed the original decision for the project in conjunction with information provided in the 2007 EA, both Supplemental EAs (2008 & 2011), public comments, and the Forest Service responses to those comments, and have determined that my original decision will remain in effect and unchanged.

/s/ Ron J. Archuleta March 11, 2011

**RON J. ARCHULETA**

**Date**

**District Ranger**

**Yellowstone Ranger District**



## **Appendix A-Responses to January 2011 Supplemental EA Comments**

This appendix to the Smith Creek Vegetation Treatment Project Decision Notice contains the agency's responses to questions and comments received during the 30-day public review and comment period for the January 2011 Supplemental Environmental Assessment. Official comments regarding the information in the supplement were due on February 9, 2011.

A total of 12 letters were received. Table 1 below lists the letter number and commenter. Comments are grouped by subject matter. Each comment is identified by letter number first and then by individual comment number after the hyphen (Example 1-1). The comments were summarized from the comment letters with the agency response following the comment. Some comments are repetitive, so responses to these comments will refer to previous letters where that specific comment has already been addressed in this appendix. Similar comments have been grouped, showing the letter and comment numbers that apply.

**Table 2-Letters and Comments Regarding the 2011 Supplemental EA**

<b>Letter Number</b>	<b>Commenter</b>
1	Larry Tobin
2	Rob Swenson
3	Ronald & Janet Hartman
4	Sharon Eickhoff/Hillman
5	Candy DeBar
6	Robert DeBar
7	William & Patricia Kamrath
8	Michael Garrity-(AWR)
9	Dan DeBar
10	Sharon & Kenneth Hapner
11	Steve Kelly (Montana Ecosystems Defense Council)
12	Sara Jane Johnson (NEC)

## Comments & Responses

### *General*

**Comment 1-1:** As a Smith Creek cabin owner and avid elk hunter, I wish to express my strong support for the Smith Creek Vegetation Project. Between those walks and fall hunting over the nearly 11 years I've owned the cabin, I have NEVER seen an elk in the project area. I do see elk regularly in areas farther away from the more populated cabin sites. I know elk do come into the project area at times to graze or pass through, but it IS NOT a bedding area. They are even less apt to linger (bed) in the project area due to the volume of human traffic on the Forest Service trails, as well as the proximity to the Smith Creek cabin sites. Rather than endangering elk habitat – a concept unsupported by people who know the area and know elk – the Smith Creek Vegetation Project will undoubtedly enhance the area for all wildlife, including elk. I hope the project becomes reality as soon as possible.

**Comment 4-1:** I am writing as an eighteen year full time resident of Smith Creek. I very much want to see the Vegetation Project implemented in our area.

**Comment 5-1:** I would very much like to see this project go forward in this area where I have recreated at our cabin for the last 17 years. I typically hike and ski sections 1 and 6 covering 12-15 miles a weekend. I have come across elk roughly 4 times with most of the sightings in open habitat where they forage for food. I believe our forests need thinning to remain healthy for elk habitat as well as for all wildlife and the forest service has the wherewithal to accomplish this task.

**Comment 6-1:** I have had a cabin in the Smith Creek area for approximately thirty years and am very familiar with the lands affected by the proposal. Throughout the years I have hiked the area numerous times. When the project was first presented the Forest Service gave a public tour of part of the area which I, along with several property owners, attended. From my observances it is apparent that the previously logged areas have had good regenerative growth which in some cases has made for some tough hiking. While there are some inherent open areas within the bounds of the project the bulk of the lands appear to support the required cover for Elk. I reviewed the Supplemental Environmental Assessment provided by the Forest Service and am in agreement with its findings. It is my belief that the project will be good for the land, area wildlife and area property owners. Thus, a win, win, win scenario.

**Response to 1-1, 4-1, 5-1, & 6-1:** Thank you for your comments and interest in the project, as well as the involvement of numerous other local residents in helping to design the proposal. We appreciate support for the project coming from individuals who live and recreate in the area.

**Comment 2-1:** I have hunted the Smith Creek area for over 30 years and the area for the proposed vegetation project is not a home for elk and to think that this

vegetation project will hamper or impede the elk's ability to find adequate cover is just not true. If for some reason an elk was passing thru this area this animal would be on its guard at all times and would know exactly where the next cover spot is. This area is just too close to a residential subdivision for the comfort of elk hanging in this area. Plus in 30+ years I have not seen elk within 1,000 yards of the proposed project.

**Response to 2-1: Thank you for your comments. We appreciate support for the project by people who regularly utilize the area.**

**Comment 3-1:** We firmly believe this is an extremely important project. It will not only help the forest health but protect individual property. Most importantly, it is a factor in protecting the lives of landowners, firefighters, rescue people and Forest visitors

**Response to 3-1: Thank you for your support. The above-mentioned benefits are the primary purpose and need for the project.**

### ***Elk Hiding Cover Personal Observations***

**Comment 3-2:** Living here fulltime, we have watched elk disappear within 50' to 100' from our home on various trails and roads in different seasons of the year. The hiding cover is more than adequate to meet the standards required in the project area.

**Comment 3-3:** The previously logged areas have predominantly filled in with new cover plus better grazing sites for elk and other wildlife.

**Comment 3-4:** On our property 3' to 5' trees have grown to 10'-18' in the past 15 year period. Logging does allow new growth to flourish and provide better hiding cover as there are more low branches.

**Comment 4-2:** I personally spend many hours outdoors in Smith Creek. Over time I have seen the once logged areas regenerate with healthy evergreen growth. The younger trees mix in with the older growth providing great elk cover. I have come upon elk signs that prove they are spending time in the forest grazing and bedding down.

**Comment 4-3:** We have also spent time watching elk graze in the meadows prior to hunting season. When they move back into the trees they immediately disappear into the thick forest. I have walked within fifty yards of elk in the trees and never seen them until they smelled me and took off. Not a great feeling as a hunter!

**Comment 7-1:** Areas that have been logged up the East Fork in years past have been re-vegetating and do so each year with new cover and forage for the wildlife in the area. These areas are now providing much needed forage for elk and other wildlife. This is reinforced by thinning that we had done on our personal acreage 7 years ago. We have seen the thinning open up areas for grasses/vegetative growth. We have seen evidence of these areas being good feeding areas much

superior to previous years. Low grasses and plants continue to fill in nicely. Also, the young trees that sprouted in these logged areas are now at least 12-15 feet tall and are providing great cover, when needed, to the elk and other wildlife populations. Growth of this height is taking place in areas of Smith Creek- East Fork.

**Comment 9-1:** I have had a cabin in the Smith Creek cabin sites for 17 years. In that time I have noticed a marked decrease in Elk activity in the area. When hiking off trail there is a lack of elk sign in the timbered and downfall areas. The trees have crowded out the forage for elk. When I want to see Elk I now go over the mountain, Goat, Scab rock and Bear to Anderson Creek or the West Side of Goat Mountain where it is more of an open forest environment. The East Fork of Smith Creek, in the previous logged area, is also great Elk habitat. Hunting the area in the last 17 years we now have to hike in to the slopes adjacent to Bald Ridge where there is open forest and 20 year old clear cuts. The elk are just not in the area of the project due to over-crowding of trees. For the good of the Elk habitat let's get this area cleaned up! I could go on about the fire risk in the area and the Urban Wildland Interface, but will save that for the next frivolous law suit.

**Response to 3-2, 3-3, 3-4, 4-3, 7-1 & 9-1:** Your personal observations are directly in line with the field observations and data collected by Forest Service personnel. The majority of the past harvest in the area occurred prior to the FS acquisition of these lands in the early 1990s making most of the plantations 20+ years old and capable of providing excellent cover for elk. Upon compiling data collected during the 2010 field season approximately 94% of the area capable of providing hiding cover is currently providing cover and after implementation of the project 87% hiding cover will remain. This is well over 2/3 (66%) of the hiding cover required by the Forest Plan standard.

**Comment 4-4:** I also believe with the many trees that have died because of the bark beetle, the fire danger in this area has risen to a considerable risk. It is a risk to the residents, the firefighters who will eventually have to try to control a wildfire; and a danger to the wildlife in this area. Prescribed thinning is beneficial to all.

**Response to 4-4:** Thank you for your opinion. It directly supports the purpose and need for this project.

**Comment 3-5:** We have observed forest service personnel trying to “get it right” by being “hands on” in their most recent survey/count/observations.

**Comment 4-5:** I know the Forest Service has studied the habitat and elk migration in this area. Their studies combined with what residents see on a daily basis should convince anyone that the Smith Creek Vegetation Project must go forward.

**Response to 3-5 & 4-5:** Forest service personnel have been to the field numerous times to develop and design this project. A FS crew went back out

to the project area to collect additional field data in the fall of 2010. Elk cover boards and decoys were used to verify modeling results and to measure the actual distances at which an elk would disappear from sight to address the Forest Plan hiding cover standard. At all sample points, hiding cover met or exceeded Forest Plan requirements for hiding cover. The Service concluded that the use of the PI strata model of  $\geq 40\%$  canopy cover was shown to be a reliable and valid proxy for measuring horizontal hiding cover.

### *Supplemental Analysis/PI Type/Data Questions*

**Comment 8-1:** Of the PI types with at least 40% canopy closure, which strata did not meet Smith & Long (1987) thresholds? Please list each such strata, as well as the number of acres of each strata in the project area.

**Response to 8-1:** The Smith and Long (1987) threshold method was used to determine if specific field samples of forested stands providing  $\geq 40\%$  canopy cover were actually providing horizontal hiding cover. This was done where relatively current stand exam data was available, thus not all strata were assessed with this method. For the stand exams that did exist in the project area, there were ten strata that did meet the 4,979" needed to represent the predicted hiding cover relationship to these attributes: DF12, DF13, LP12, LP13, LP23, LP31, LPDF12, LPDF22, SAF12, and SAF13. There were nine strata that did not meet the 4,979" needed to represent the predicted hiding cover relationship to these attributes: DF22, DF32, LP11, LP22, LP32, LPDF13, LPDF32, SAF11, and SAF32. There does not appear to be a correlation between those strata that have  $\geq 40\%$  canopy cover and a cumulative diameter at breast height (DBH)  $> 4,979"$  using the Smith and Long (1987) method. This is consistent with the field assessment findings (Supplemental EA, page 39). Stratum with stand exams that did not meet the cumulative DBH model total 745 acres. Stand exam data from these strata were collected in 1984, 1986, 1985, 1984, and 1985 respectively. According to the Forest Vegetation Simulation (FVS) model (Novak, 2010) that looked at stand exam data to determine growth rates, trees could be expected to be 11-13 feet tall at around twenty years post harvest; Smith and Long (1987) suggested that sapling trees 5 feet in height provide enough structure to be hiding cover. Therefore, stands with measurements taken over twenty years ago do not reflect this expected growth since that time. Regardless, three other project areas across the Forest found that the Smith and Long (1987) calculation was not as consistent or as reliable as field sampling. Also see response to Comment 12-15. Lastly, only live trees were used in the assessment. Any dead and down material, shrub layers, or standing dead trees that exist would also contribute to some additional level of screening.

**Comment 8-2:** When hiding cover is assessed using only the Smith & Long (1987) criteria, how many acres of hiding cover are there in the project area?

**Comment 12-5:** The measurements of hiding cover by PI types by the Smith and Long (1987) methodology should be provided to the public.

**Response to 8-2 & 12-5:** The Supplemental EA (pp. 39-40) discloses that the analysis of hiding cover using the Smith and Long (1987) methodology, or the cumulative DBH of a stand from stand exam data, was not consistent with

field studies between study areas on the Gallatin NF where a much higher propensity of mixed species and multi-storied conditions exist. Field sampling was found to be a better crosswalk between the modeled hiding cover ( $\geq 40\%$  canopy cover) and the Forest Plan definition (vegetation capable of hiding 90% at less than 200').

Correspondingly, the Supplemental EA (Table 8, page 39) displays the stand exam data for two other analysis areas on the Gallatin National Forest. The Smith and Long (1987) calculation was not as consistent or as reliable as the field sampling of PI strata. As explained in the Supplemental EA (p. 7), the protocol for assessing hiding cover outlined in Smith and Long (1987) was conducted for the Smith Creek Project. Using total live tree data only, the average calculated value of DBH and trees per acre (TPA) across most strata far exceeded the 4,729" [this should have read 4,979"] needed to represent the predicted hiding cover relationship to these attributes. The summary conclusion of data associated with the Smith Creek project area was based on the raw data below:

BEST STRATUM within Smith Creek project area	# EXAMS Compartment 221	Average Cumulative DBH " (need 4,979")	% Exams Exceeding Smith and Long Threshold
DF12	15	37,856	93
DF13	8	25,747	100
DF22	1	4,565	0
DF32	1	2,743	0
LP11	1	396	0
LP12	12	16,023	75
LP13	71	21,940	98
LP22	3	3,454	33
LP23	12	12,823	92
LP31	3	8,017	67
LP32	6	765	0
LPDF12	6	22,758	83
LPDF13	1	1,199	0
LPDF22	2	5,327	50
LPDF32	2	2,504	0
SAF11	1	207	0
SAF12	12	14,921	83
SAF13	3	24,436	67
SAF32	1	476	0

\*SHADED = QUERY FOR  $\geq 40\%$  TREE CANOPY COVER

**Comment 8-3:** Of all the field samples taken, how many individual quadrants (under the elk decoy method) had 90% cover at 200 feet?

**Response to 8-3: Of the field samples taken in the Smith Creek project area, 187 individual quadrants had 90% or above cover at 200 feet. Also see response to Comment 12-4 below.**

**Comment 8-4:** Of all the field samples taken, how many individual quadrants (under the elk decoy method) did not have 90% cover at 200 feet?

**Response to 8-4: Of the field samples taken in the Smith Creek project area, only one individual quadrant had less than 90% cover at 200 feet. Also see response to Comment 12-4 below.**

**Comment 8-5:** Of all the field samples taken, how many of the “cardinal direction” lines (under the cover board method) had cover at 90% at 200 feet?

**Response to 8-5: Of the field samples taken in the Smith Creek project area, 177 of the cardinal direction lines had cover at 90% or above at 200 feet. Also see response to Comment 12-4 below.**

**Comment 8-6:** Of all the field samples taken, how many of the “cardinal direction” lines (under the cover board method) did not have cover at 90% at 200 feet?

**Response to 8-6: Of the field samples taken in the Smith Creek project area, eleven of the cardinal direction lines had less than 90% cover at 200 feet. Also see response to Comment 12-4 below.**

**Comment 8-7:** How many total acres of strata with over 40% canopy closure were field sampled?

**Response: to 8-7: The field sampling methodology is explained in Appendix B of the Hiding Cover Assessment Document (p. 35 of the Supplemental EA). Random samples were collected across a total of 1783 acres of PI strata representing stands with at least 40% canopy cover within the project treatment units.**

**Comment 12-3:** Please provide a list of all PI types that occur in the Smith Creek Project area and define what the estimated percentage of hiding cover is for each PI type.

**Response to Comment 12-3: PI strata types representing forested strata that occur in the Smith Creek project area which were used to establish a baseline capable of providing hiding cover and to model existing hiding cover include DF11, DF12, DF13, DF22, DF23, DF32, LP11, LP12, LP13, LP22, LP23, LP31, LP32, LP33, LPDF11, LPDF12, LPDF13, LPDF22, LPDF23, LPDF31, LPDF32, LPDF33, SAF11, SAF12, SAF13, SAF23, SAF31, SAF32, SAF33. The baseline hiding cover and best stratum key was defined in the Supplemental EA, page 33-34. The estimated percentage of canopy cover for each stratum is depicted by the second numeral of the stratum label (1=<40%; 2=40-70%; 3=>70%).**

**Comment 12-4:** Also please provide what the percentage hiding cover for PI types would be provided that only 1 of the 4 directions provided hiding cover, if 2 of the directions provided hiding cover, if 3 of the directions provided hiding cover, and if all 4 of the directions provided cover as per the sampling methodology where hiding cover was sampled in 4 different directions similar to the measurement of horizontal cover measured for snowshoe hares.

**Response to 12-4:** Hiding cover was assessed in the field from a plot center in each of 4 cardinal directions; then averaged over the 4 directions for the plots within a given PI stratum to get a composite percentage of hiding cover by PI strata (Table 7, p. 38 of the Supplemental EA). The field observation data for the Smith Creek Project Area is found in the following table.

Smith Creek Field Sampling Summary		Cover Board					Elk Decoy			
Plot	N	E	S	W	AVG	N	E	S	W	AVG
SCDF121	100	100	100	95	99	100	100	100	100	100
SCDF122	100	100	100	95	99	100	100	100	100	100
SCDF123	100	100	95	100	99	100	100	100	100	100
SCDF124	100	100	100	100	100	100	100	100	100	100
SCDF131	100	100	100	100	100	100	100	100	100	100
SCDF221	80	100	100	95	94	100	100	100	100	100
SCHLP221	100	100	100	100	100	100	100	100	100	100
SCHLP222	100	100	100	100	100	100	100	100	100	100
SCHLP223	100	40	100	0	60	100	100	100	100	100
SCHLP321	100	100	100	100	100	100	100	100	100	100
SCHLP322	100	100	100	100	100	100	100	100	100	100
SCHLP323	100	100	90	90	95	100	100	100	100	100
SCHLP324	100	60	90	100	88	100	100	100	100	100
SCHLP331	85	100	90	100	94	100	100	100	100	100
SCHLP332	100	100	100	100	100	100	100	100	100	100
SCHLPDF321	0	100	100	100	75	60	100	100	100	90
SCHLPDF322	100	95	100	100	99	100	100	100	100	100
SCHSAF321	100	100	100	100	100	100	100	100	100	100
SCHSAF331	100	100	100	100	100	100	100	100	100	100
SCLP121	100	100	100	100	100	100	100	100	100	100
SCLP131	90	90	100	100	95	100	100	100	100	100
SCLP132	95	100	100	100	99	100	100	100	100	100
SCLP133	100	95	100	100	99	100	100	100	100	100
SCLP134	100	95	100	100	99	100	95	100	100	99
SCLP135	100	100	100	100	100	100	100	100	100	100
SCLP221	100	100	100	50	88	100	100	100	100	100
SCLP222	100	100	100	100	100	100	100	100	100	100
SCLP223	100	100	100	100	100	100	100	100	100	100

Smith Creek Field Sampling Summary		Cover Board					Elk Decoy			
SCLP231	100	100	95	100	99	100	100	100	100	100
SCLP232	100	100	95	100	99	100	100	100	100	100
SCLP233	100	100	100	60	90	100	100	100	100	100
SCLP321	100	100	100	98	100	100	100	100	100	100
SCLP331	100	95	100	100	99	100	100	100	100	100
SCLPDF121	100	100	100	100	100	100	100	100	100	100
SCLPDF131	100	100	100	100	100	100	100	100	100	100
SCLPDF132	100	100	100	100	100	100	100	100	100	100
SCLPDF221	100	95	100	100	99	100	100	100	100	100
SCLPDF231	100	100	100	100	100	100	100	100	100	100
SCLPDF232	100	100	100	100	100	100	100	100	100	100
SCSAF121	100	100	100	90	98	100	100	100	100	100
SCSAF122	100	75	100	10	71	100	90	100	100	98
SCSAF123	100	100	100	100	100	100	100	100	100	100
SCSAF124	100	100	100	100	100	100	100	100	100	100
SCSAF231	100	100	20	100	80	100	100	100	100	100
SCSAF232	100	100	100	100	100	100	100	100	100	100
SCSAF321	20	100	100	100	80	100	100	100	100	100
SCSAF322	100	100	100	100	100	100	100	100	100	100

**There were no plots where only one of 4 directions provided hiding cover based on the cover board measurement methodology. 100% of the 47 plots had hiding cover in two cardinal directions with the cover board. 96% of the plots had hiding cover in 3 of the 4 cardinal directions, and 79% of the plots had hiding cover in all 4 cardinal directions. Only one time out of 188 observations using the elk decoy was there less than 90% of the elk hidden by vegetation. Clearly, this demonstrates that the vegetation on all the plots was “capable of concealing 90% of a standing adult big game animal from view of a human at a distance equal to or less than 200 feet.”**

**Comment 12-10:** There was no specific information in the Supplemental EA regarding how commercial thinning would affect hiding cover. It is unclear as to which thinned areas were sampled for hiding cover values. Please identify PI types that include recently logged areas in your samples.

**Response to 12-10:** The Supplemental EA (pp. 6-8 and 31-34) describe the analysis methodology and results, including the effects of past timber harvest within the project area. Specifically, these sections refer to the samples that were selected from stands that were characterized as hiding cover based on their PI label (forest stands with at least 40% tree canopy cover) within the proposed treatment units. Based on field samples, all PI types representing  $\geq 40\%$  tree canopy, on average, concealed 90% of a cover board in less than 200 feet and 100% of an elk decoy. It goes on to disclose that the quantitative analysis completed to check consistency with the Forest Plan standard

considered all proposed treatment units to be devoid of hiding cover after implementation. This resulted in an estimate of hiding cover that is lower than what will actually be left after the harvest activity as thinning overstory and understory is not complete removal of cover. As discussed in the Supplemental EA, (p. 11), prescriptive treatments and mitigation will allow for hiding cover to be retained, particularly around habitat components. PI types representing <40% canopy cover were also examined relative to their capability to provide hiding cover and to see if they were inherently open or, if previously harvested, had recovered from past harvest activity enough to provide hiding cover. As explained in the Supplemental EA (pp. 6 & 25), the Forest Activity Tracking System (FACTS) database was consulted to identify previously harvested areas and these areas represent the following PI forested strata types: DF32, LP22, LP23, LP31, LP32, LP33, LPDF31, LPDF32, LPDF33, SAF31, SAF32, SAF33.

**Comment 12-11:** If the purpose of a project is to reduce fuels, or understory vegetation, yet you are measuring the hiding cover level by PI type or canopy cover, how can a 40% canopy cover level identify horizontal cover that has been purposely removed?

**Response to 12-11:** The hiding cover analysis disclosed the effects of the vegetation treatments. The purpose of the Supplemental EA was to address the Court's findings. Also see response to Comment 8-7, 8-8, 11-3, 12-2, and 12-10.

**Comment 12-12:** Also please address how the range in canopy cover for PI types was addressed in your sampling. Since the 3 canopy cover categories for PI types all cover a range of canopy cover levels, how are these ranges addressed?

**Response to 12-12:** See responses to Comment 8-7, 12-11.

**Comment 12-15:** The results in Table 8 at page 39 are confusing. It seems like the lower the canopy cover, the higher the horizontal hiding cover levels are.

**Response to 12-15:** Table 8 summarizes the "Smith and Long" method of assessing hiding cover using stand exam data for the Lonesome Wood and Bozeman Municipal Watershed project areas. In lodgepole pine stands in Wyoming, they found a correlation between stand exam data, where the sum of the diameters at breast height (dbh) for all the trees in a stand exam plot exceeded 4979" and field measured hiding cover.

Your comment is that the PI stratum representing canopy cover <40% (shown in white in the table) seem to have higher horizontal hiding cover levels. First of all, those <40% PI stratum have relatively few exams to draw on for comparison, and secondly, the data, overall, really do not show any kind of strong pattern. However, just looking at the Lonesome Wood area, for lodgepole pine dominated stands, the higher canopy cover PI stratum (e.g. LP12, 13, 23, 22) exceed the Smith and Long "threshold" for cumulative dbh more often than low canopy cover lodgepole pine stratum (e.g. LP11, 31).

**Because their study was in lodgepole pine stands only, we are electing to be cautious in applying their model to other forest types.**

**As explained on page 39, there did not seem to be a consistent correlation between the Smith and Long hiding cover model and our field-measured hiding cover. This is probably because the forests on the Gallatin National Forest generally include a mix of species and are often multistoried. Smaller trees with full crowns in the understory have great screening value, but don't contribute very much to the sum of the stand dbh. For these reasons, we elected to measure hiding cover in the field rather than rely on stand exam data and the Smith and Long hiding cover model.**

**Comment 8-8:** What “new information” was used in the hiding cover calculation that was not available to the decision-maker at the time of the first two EAs and first two decisions?

**Comment 11-3:** The EA fails to disclose any significant new information used to calculate elk cover that was not available to the deciding officer in previous EAs/FONSIIs at issue in *Hapner v. Tidwell*, 621 F.3d 1239, 1250 (9<sup>th</sup> Cir. 2010).

**Response to Comments 8-8 & 11-3:** New information gathered and analyzed to address the Court's findings is spelled out in detail on pp. 6-11 of the 2011 Supplemental EA. The Supplemental EA even mentions this as ‘new’ information. Specifically, See Sampling Results (p. 8), Hiding Cover Effects Analysis (p. 9), Table 1-Quantitative Measure of Elk Hiding Cover Overtime, footnotes, and final paragraph (p. 10). In addition, Table 7 (p. 38) displays the results of the analysis of the newly collected field data for the Smith Creek Project.

### ***Ninth Circuit Court Order Comments***

**Comment 8-9:** The United States Court of Appeals for the Ninth Circuit has already issued a legally binding court order for the Smith Creek Project in *Hapner v. Tidwell* that explicitly agreed that “the Project violates the Plan because it would reduce elk cover to under two thirds.” The Court further held that “[a]ccording to a table in the Helena National Forest Plan, 60% elk cover as measured under the canopy cover definition translates to 42% elk cover as measured under the Gallatin Plan definition. The Project therefore violates the Gallatin Plan's two-thirds elk-cover requirement.” 621 F.3d 1239, 1250 (9<sup>th</sup> Cir. 2010)(emphases added). Why didn't the Forest Service disclose these court holdings to the public in the supplemental EA?

**Comment 8-15:** The Forest Service's new method of calculation violates the court order in *Hapner v. Tidwell*. The United States Court of Appeals for the Ninth Circuit has already issued a binding factual finding on the amount of hiding cover that exists in the project area under the “40% canopy closure” method: “[t]he other calculation suggested 62% elk cover under a canopy cover definition.” *Hapner*, 621 F.3d at 1250. This finding that there is 62% hiding cover under the canopy closure methodology is the law of the case for this

project. The Forest Service's attempt to ignore this factual finding from a legally binding court order and change around denominators to come up with a higher percentage so that it can approve the timber sale violates the law.

**Comment 11-4:** The Federal 9<sup>th</sup> Circuit Court of Appeals has already determined that the Smith Creek Project violates the Forest Plan by removing elk cover below the two thirds standard required by the Forest Plan. The EA is not the proper venue to re-litigate the Court's order. An EA cannot serve solely as an ad hoc rationalization, or a legal tool to inject supplemental arguments before the Court. The *Hapner* case was decided.

**Response to 8-9, 8-15, & 11-4:** To clarify what the court order actually states “We therefore conclude that the Service has violated the Gallatin Plan, and NFMA, by not ensuring that the Project complies with the current Gallatin Plan elk-cover requirements. We remand to the Service to remedy this error.” Page 14187 of the order explicitly states, “The Service’s failure to measure elk cover as defined by the Gallatin Plan renders us “unable to determine from the record that the agency is complying with the forest plan standard.” This is precisely the reason the Service developed a field protocol, which is described in detail in Appendix A of the Supplemental EA (Gallatin Forest Plan Hiding Cover Standard Assessment) to establish the relationship between hiding cover as represented by photo-interpreted models and the literal definition of hiding cover as defined in the Gallatin Forest Plan.

**Comment 8-10:** The Forest Service has not recommended any changes to the project in the supplemental EA. Approving the same project without any changes despite the unequivocal statements in the court order that the project “would reduce elk cover to under two thirds” and that the project “violates the Gallatin Plan's two-thirds elk-cover requirement” is a clear violation of the court order and grounds for contempt of court.

**Response to 8-10:** As stated above, the Court did not rule that the project would reduce elk cover to under two thirds, instead they remanded the project to the Service to provide evidence that the project is in compliance with the Gallatin Forest Plan standard for hiding cover. This is precisely why the Service developed a reasonable field protocol, which is described in detail in Appendix A of the Supplement, collected additional field data, reviewed the data, compared the data with the original findings for hiding cover, and prepared a Supplemental EA to address the Court remand.

**Comment 8-11:** If the Forest Service believed that there were factual mistakes regarding the percentage of hiding cover documented in the court order, it should have requested a panel rehearing or rehearing en banc to address any alleged factual mistakes. It did not do so at the appropriate time and is now bound by the factual findings in the court order because the findings are the law of the case.

**Response to 8-11:** On p. 14187 of the Court order, (22) it is stated that two separate measures of elk cover were relied on, neither of which measured elk cover according to the Gallatin Plan standard of “vegetation capable of concealing 90% of an adult big game animal (i.e. elk) from the view of a

human at a distance equal to or less than 200 feet” Then the order gives examples of calculations, but goes on to state that the Court is “unable to determine from the record that the agency is complying with the forest plan standard.” The purpose of the additional field sampling and analysis conducted for the Supplemental EA is to address the Court’s remand by demonstrating to the Court that the Service will be in compliance with the GFP hiding cover standard as the Court instructed the Service to do on p. 14189 of the order.

As stated above, the Court found that we had violated the Gallatin Plan, and NFMA, by not ensuring that the Project complies with the current Gallatin Plan elk-cover requirements. They remanded the project to us to remedy this error. While we may have disagreement with the Court’s decision we respectfully accepted it. Therefore the appropriate course of action was to address the Court remand by collecting additional information and conducting additional analysis to demonstrate that the project does comply with Plan elk-cover requirements.

**Comment 8-12:** The Forest Service’s argument that 40% canopy cover is an interchangeable “proxy” for the Forest Plan definition of hiding cover is not credible. The Forest Service’s position was already rejected by the Ninth Circuit in *Hapner v. Tidwell* ... Thus, not only has the Forest Service’s position been rejected by binding legal precedent that is the law of this case, but its position is flatly contradicted by its own statements in the Gallatin National Forest Plan.

**Response:** We disagree with your interpretation of the Circuit Court’s Opinion. The Court did not reject the concept of using canopy cover as a proxy for measuring the amount of hiding cover, rather they said that we failed to demonstrate a sufficient connection such that we could ensure that the Forest Plan hiding cover standard was being met.

**Comment 8-18:** The injunction against this project is still in place. There is a court-ordered injunction currently in place against this entire project. If the agency plans to attempt to move forward with this illegal project, it must file a motion to dissolve the court-ordered injunction and that motion must be granted in the agency’s favor. If both of these events do not occur prior to project implementation, the agency will be in contempt of court.

**Comment 12-1:** There is no information in the supplement regarding how the current permanent injunction for this project, as per the 9<sup>th</sup> Circuit Court of Appeals, will be addressed. The court will have to decide if the new analysis will remedy the hiding cover problem for which the injunction was granted. The public should be provided with this information.

**Response to 8-18 & 12-1:** The agency does not intend to move forward with project implementation until such time that the Circuit Court has reviewed the information in the Supplemental EA and the remand has been determined to be remedied, a motion to dissolve the injunction is filed, and the motion is granted in the agency’s favor.

### ***Hiding Cover Field Sampling And Modeling***

**Comment 8-13:** The Forest Service’s reliance on the field sample methodology is arbitrary and capricious. The field samples taken to justify the hypothesis that the canopy cover definition and the Gallatin Forest plan definition are interchangeable were tainted by inadequate methodology, observer bias, and desire to find a way to move forward with logging in the area. Thus, using these samples as the primary justification for this new proxy hypothesis is arbitrary and capricious.

**Response to Comment 8-13:** A description of the methodology used is summarized on pp. 6-8 and thoroughly described on pp. 19-40 of the Supplemental Environmental Assessment. We deny that this methodology is in any way arbitrary, capricious, tainted, or biased.

As explained in the Hiding Cover Assessment, the 40% canopy cover “proxy” for hiding cover was first developed in a model by Lonner and Cada (1982) (Supplemental EA, p. 22). We had no reason to be arbitrary or biased in our testing of this assumption and we used a protocol that combined methods developed by other researchers to assess hiding cover and/or horizontal cover in the field. This is documented in the Supplemental EA (pp. 35-36). The selection of plot locations was systematic, representative, and unbiased. Random locations were input into GPS units and navigated to in the field. Field crews that were assigned the work had no stake in the outcome. Photographs were taken at each plot in each cardinal direction to help in the interpretation of the data. For example if “0” hiding cover was recorded for one cardinal direction, and all other directions had high values, the photographs helped determine if a recording error occurred, or if one direction was through an opening in the forest.

As stated in the court order for Case 9:09-cv-00159CCL, Document 64, pp. 20-21 (02/14/11) “When evaluating agency action, courts extend deference to the agency’s interpretation of the statutes and regulation the agency administers (Natural Resource Defense Council v. Dept of Interior, 9<sup>th</sup> Cir. 1997). An agency’s interpretation of its own regulations controls unless it is “plainly erroneous or inconsistent with the regulation” (Nev. Land Action Ass’n v. US Forest Service, 9<sup>th</sup> Cir. 1993). Deference is also appropriately extended to matters within the agency’s scientific expertise (Ecology Center v. Castenada, 9<sup>th</sup> Cir. 2009)”.

**Comment 8-14:** The Forest Service’s failure to disclose and discuss the full results of the actual hiding cover modeling it conducted on remand is arbitrary and capricious. The EA discloses that finally in the second supplemental EA process “the protocol for assessing hiding cover outlined in Smith and Long (1987) was conducted for the Smith Creek Project.” However, although the Forest Service discloses that it used this method, it does not disclose the full results. The agency’s decision to rely on biased field observations to justify its pre-determined conclusion is arbitrary in light of the fact that it is ignoring

contrary evidence from objective modeling that was designed specifically for this hiding cover definition.

**Response to Comment 8-14:** See responses to Comments 8-1, 8-2, 8-7, 12-5, 8-13.

**Comment 10-1:** The Second Supplemental EA to the proposed project, like the parent EA, FONSI, decision, and 1<sup>st</sup> supplemental EA still lacks depth, supporting data, and scientific rigor. References cited to support the field analysis and mapping data largely rely on “personal communication”, “office memoranda”, “2 unpublished papers, and 1 publication dated 1987. All but one reference comes from the Gallatin National Forest or Montana Fish, Wildlife, and Parks. Once again there were no independent ecology experts consulted and no timely research cited from academic literature.

**Response to Comment 10-1:** In the development of the Gallatin Forest Plan Hiding Cover Assessment, Gallatin Forest Wildlife Biologist Jodie Canfield, who has been a contributing author on several key publications dealing with hiding cover, security areas, and the effects of recreation on big game, did a literature review (see p. 41 Supplemental EA) and consulted colleagues (p. 23). As explained in the assessment, there is very little recent literature on the subject (pp. 23-24 Supplemental EA).

Also, see pp. 22-23 of the Supplemental EA (Vegetation Based Proxies for “Hiding Cover”: Literature Review).

As stated in the court order for Case 9:09-cv-00159CCL, Document 64, pp. 20-21 (02/14/11) “When evaluating agency action, courts extend deference to the agency’s interpretation of the statutes and regulation the agency administers (Natural Resource Defense Council v. Dept of Interior, 9<sup>th</sup> Cir. 1997). An agency’s interpretation of its own regulations controls unless it is “plainly erroneous or inconsistent with the regulation” (Nev. Land Action Ass’n v. US Forest Service, 9<sup>th</sup> Cir. 1993). Deference is also appropriately extended to matters within the agency’s scientific expertise (Ecology Center v. Castenada, 9<sup>th</sup> Cir. 2009)”.

**Comment 10-3:** In Appendix A-Gallatin National Forest Plan Hiding Cover Standard Assessment, the authors attempt to interpret/re-write the forest plan standard in order to support the data analysis and conclusions found in the body of the document. If the original Forest Plan hiding cover standard and one related amendment does not adequately describe and define the standard and how best to assess hiding cover, it would seem best to generate a new Forest Plan. We find the proposition that a “white paper” can be used to expand, explain and interpret the present Gallatin National Forest Plan Hiding Cover Standard Assessment to be self-serving, facetious, and probably illegal. We question the use of the entire 2<sup>nd</sup> Supplemental EA as a valid response to the decision of the 9<sup>th</sup> Circuit Court.

**Comment 11-8:** We generally agree that the most up-to-date, peer-reviewed science should be incorporated into project-level analysis. However, the

Appendix A “white paper” has not been peer-reviewed; therefore it is arbitrary and capricious to supplant existing Forest Plan methodology without an EIS.

**Response to Comment 10-3 & 11-8:** As clarified in the Response to Comment 8-9, the Court found that the Service had failed to ensure that the Project complies with the current Gallatin Plan elk-cover requirements. The Court remanded the project to the Service to remedy this error. Many changes have occurred since the original forest plans were written that can make the application of existing standards difficult, because the standards do not reflect current scientific knowledge or management realities. In addition, many of the so called “standards” were written more like goal statements, lacking detail and clarity. Amendment of the Forest Plan to change the hiding cover standard is one option but we believed the appropriate course of action at this time was to address the Court remand by collecting additional information and conducting additional analysis to demonstrate that the project does comply with the existing Plan elk-cover requirements.

The purpose of the Gallatin Forest Plan Hiding Cover Assessment (Appendix A of the Supplemental EA) is to provide interpretation and guidance on compliance with the existing Forest Plan hiding covered standard for use in project level analyses. There was internal Gallatin National Forest review of this “white paper” and it was based on science and review of the Forest Plan FEIS (Supplemental EA, pages 21 and 22). Because there is no specific existing direction or discussion regarding the methodology to use to determine compliance with the standard, a peer-review by non-Forest personnel would not be necessary or appropriate.

As stated in the court order for Case 9:09-cv-00159CCL, Document 64, pp. 20-21 (02/14/11) “When evaluating agency action, courts extend deference to the agency’s interpretation of the statutes and regulation the agency administers (Natural Resource Defense Council v. Dept of Interior, 9<sup>th</sup> Cir. 1997). An agency’s interpretation of its own regulations controls unless it is “plainly erroneous or inconsistent with the regulation” (Nev. Land Action Ass’n v. US Forest Service, 9<sup>th</sup> Cir. 1993). Deference is also appropriately extended to matters within the agency’s scientific expertise (Ecology Center v. Castenada, 9<sup>th</sup> Cir. 2009).

For additional information please refer to the discussion of “Current Context” on pages 23 and 24 of the Supplemental EA. Also see response to Comment 10-1 above.

### ***Hiding Cover Analysis Methodology/Calculations***

**Comment 8-16:** The appropriate denominator for the hiding cover calculation is the entire project area. The scientific study that was the premise for the elk standards in the Gallatin Forest Plan was Lyons et al (1985), Coordinating Elk and Timber Management. This study found that good cover was “at least two-thirds of total area.” Thus, the “total area,” i.e. the entire project area, is the appropriate denominator for the hiding calculation. This was the agency’s practice for over two decades of forest plan implementation, including the hiding cover

calculations for the original EA, first supplemental EA, original Decision Notice, and second Decision Notice for this project.

**Comment 8-17:** The new proposed methodology to calculate hiding cover was primarily inspired by litigation and the desire to forge ahead with this timber sale. As noted above, the original intent of the forest plan hiding cover standard, as well as the long-standing agency practice, including the practice in this case until now, was that the denominator for the hiding cover calculation is the entire project area. Now, for the first time after 24 years of forest plan implementation, and only after losing in court on the issue of hiding cover compliance, the Forest Service has crunched numbers to “recalculate” hiding cover with a new denominator to boost the hiding cover percentage to above 67% in this case.

**Comment 12-7:** There was no specific information as to what new science as per hiding cover analysis was, and why this would change measurements of hiding cover from the total landscape area to only forested areas. The Agency needs to clarify what the new science is and why it applies to the Smith Creek Project.

**Response to Comments 8-16, 8-17, & 12-7:** You have taken this citation, Lyons (1985) out of context. The language about good cover and poor cover is not specified to define how much cover is “good” overall, but rather is in reference to the relationship between cover and road restrictions. The recommendation is to restrict road use inversely with how much cover exists on the total area. Also, on page 1 of Lyon (1985)(Coordinating Elk and Timber Management) it states, “Managers are cautioned that literal application of these recommendations should not be substituted for detailed, on-site discussion by timber, wildlife, and other resource specialists. There may be situations in which one or more of these recommendations may not be applicable to local conditions.” That publication acknowledged that results from one study area or even several study areas would not necessarily reflect conditions across the state. These recommendations were generally derived from research in western Montana where forested cover is the rule and natural openings are rare. The only publication that makes an evaluation of the optimal ratio of cover: open habitat that might be pertinent to southwest Montana, where cover and openings are interspersed in a natural mosaic, is Thomas et al. (1979), who described ideal habitat for big game as 60% forage and 40% cover.

Furthermore, the Gallatin Forest Plan standard does not say 2/3 of the area should be cover; it says to “maintain 2/3 of the hiding cover associated with key habitat components over time.” Based on the judgment of the Court, the methodology we had been using to show compliance with the Forest Plan hiding cover standard was not adequate. It didn’t demonstrate that we were maintaining 2/3 hiding cover “over time” (Opinion, page 14188). You can’t make hiding cover out of a natural opening – it would not make sense to apply the 2/3 over an entire area that includes both forest and natural openings. The intent of the standard clearly is to maintain, in relationship to timber harvest, the majority of the cover that functionally provides screening for big game animals. “Subsequent timber sale activity will be allowed after regeneration provides hiding cover.” This acknowledges the temporal impact

**of timber harvest relative to hiding cover; trees grow back and trees grow up and hiding cover functionality can be recovered.**

**In our latest analysis, unlike the previous analysis, we are accounting for the acres, which are “capable” of being hiding cover, but which are currently not functioning as such (trees too sparse or not tall enough) by distinguishing between “baseline hiding cover” and “existing hiding cover”. This has the effect of putting additional constraints on the number of acres which can be treated by thinning or other vegetation manipulation, not vice versa.**

**Also see Response to Comments 8-8 & 11-3.**

**Comment 12-14:** The Supplemental EA refers to the new science regarding the management of big game hiding cover. Yet the science regarding big game security was never addressed, even though it postdates the Gallatin Forest Plan.

**Response to Comment 12-14:** The Smith Creek Vegetation Treatment EA (USDA 2007) addressed big game vulnerability and security cover, which were fully addressed in the Gallatin National Forest Travel Plan, although there is no Forest Plan standard to conduct an elk security analysis. The analysis indicated that the hunting district (of which Smith Creek project area is a part) met the Hillis model (Hillis and others 1991) for elk security cover. Since there are no new roads or changes in access that would increase open road density, these factors relative to elk vulnerability were not analyzed further.

**Comment 12-8:** The agency continues to use arbitrary project area boundaries to analyze hiding cover. Please define what methodology was used to delineate the boundary of the project area in regards to private inholdings and other adjacent private lands. What were the criteria in determining which private lands would be included in the project area analysis of hiding cover?

**Response to Comment 12-8:** The appropriate analysis area for hiding cover was defined in the Creek Vegetation Treatment EA (USDA 2007) and has not changed for this Supplemental EA (p. 8). The geographic analysis area for evaluating effects of this project on wildlife species and their habitat was based on known occurrence of those species or for whose habitat is present within the influence of the project wherein that species or its habitat could be impacted. Because the appropriate analysis area was not defined in the Forest Plan (Supplemental EA, p. 20), these are determined at the individual project level (Supplemental EA, p. 24). Effects of activities on both National Forest and private lands within the project area were considered in the Smith Creek Vegetation Treatment EA. “Where data for private lands was available (legacy data following a land exchange in the project area), it was used in the analysis for hiding cover.”?

**Comment 12-9:** By using only forested acres capable of providing cover, this analysis method has no biological meaning. There would be no standard amount of hiding cover required for any given landscape. Since the standard would not

produce a consistent measurement of habitat values for big game, it would not define local habitat conditions for wildlife.

**Response to Comment 12-9: What would have no biological meaning is to use forested acres NOT capable of providing cover. By including all forested acres with potential to provide cover, we addressed the Forest Plan standard and Court’s opinion regarding the ‘over time’ factor for hiding cover maintenance. See response to Comments 8-16, 8-17, and 12-7.**

**Comment 8-19:** The second supplemental EA contains a material misrepresentation of fact that must be corrected and disclosed to the public. The Second Supplemental EA states:

“The Smith Creek Vegetation Treatment EA (USDA 2007) indicated that hiding cover was not limiting in the Smith Creek watershed. It referenced the vegetative structure diversity analysis which stated that approximately 70-90% of the area provides forested hiding cover. It went on to state that additional modeling indicated that approximately 62% of the area is at or above 40% tree canopy cover.” This is a factual misrepresentation. The original EA never stated that the project area has 70-90% hiding cover. In actual fact, the original 2007 EA at A-59 states:

“Hiding and thermal cover are not limiting in the Smith Creek watershed. Vegetative structure diversity analysis indicates that approximately 70-90% of the area provides forested cover. Additional modeling indicates that approximately 62% of the area is at or above 40% canopy cover.” In other words, the Forest Service absolutely did not conclude in the original EA that hiding cover was 70-90%. This violates NEPA.

**Response to Comment 8-19: You are correct that the Smith Creek Vegetation Treatment EA (USDA 2007) did not specify the 70-90% forested cover as hiding cover. A worse misrepresentation, however, was that the area with 40% canopy cover was 62% of the entire project area, and not just the area capable of providing hiding cover. This calculation had no merit relative to the Forest Plan standard as acknowledged and displayed more clearly in the Supplemental EA (p. 10). Based on the hiding cover assessment, field validation methodology, and new analysis based on forested areas capable of providing hiding cover (and what is currently providing hiding cover), the results seem somewhat consistent (85% is within the 70-90% ) with that indicated in the vegetative structure diversity analysis. See Table 1 (p. 10 Supplemental EA).**

**Comment 11-6:** The Supplemental EA appears to be deliberately misleading, confusing and wrong on the actual number of acres that currently qualify as elk hiding cover. Of the baseline 1,223 acres “capable of providing hiding cover,” “...589 acres had harvest activity at some point in time, and had not recovered the ability to provide hiding cover,” or 48% (EA, p. 8). The Forest Service has offered no more detail about the 48% of non-recovered baseline acres. Are these acres “restocked,” or not? (See: NFMA§ 6(g)(3)(E) and 36CFR 219(c)(3)).

There is no evidence that regeneration will ever increase the acres of post-logging available elk hiding cover on similar sites in the project area in the future.

**Response to Comment 11-6:** We are sorry if it is confusing, but it is certainly not deliberate. There is a lot of number crunching and we tried to provide the clearest, most succinct summary we could without including minutia of all the data (which can be found in the Project File). Yes, the 1,223 acres was considered capable of providing hiding cover. But these acres are only a subset of those strata currently modeled as having <40% tree canopy cover (total of 1,918 acres). The remaining acres of this subset (695 acres) were considered to be naturally open which is why they were not included in the hiding cover baseline (1,918-695) (Supplemental EA, page 6). Then, of this 1,223 acres that currently are <40% canopy cover but are capable of providing hiding cover, 589 acres had not yet recovered, leaving 634 acres serving as existing hiding cover. This was critical to determine to address the “over time” issue. The 589 acres were subtracted from the allowable modification of one third of the overall hiding cover at any point in time, along with the hiding cover within all of the proposed treatment unit acres (Supplemental EA, p. 8).

**Comment 12-2:** It is not clear exactly what the methodology was for the conversion of hiding cover based on PI types to Forest Plan hiding cover. The standard methods for measuring hiding cover by PI types involves a conversion factor, with each PI type given a conversion rating for hiding cover. The Gallatin needs to provide this information to the public so we can understand how hiding cover is being measured in PI types according to established methodology.

**Response to Comment 12-2:** The Gallatin Forest Plan does not have a PI conversion for hiding cover. The Forest Plan definition is the “capable of concealing 90% of a standing adult big game animal from view of a human at a distance equal or less than 200 feet.” The PI concept for hiding cover was originally derived in Lonner and Cada (1982) as a way to model the relationship between cover, road restrictions, and hunter opportunities. They did not apply any conversion, but accepted that PI strata that are representative of forest stands with at least 40% canopy cover were functional hiding cover. Our standard hiding cover model was to use the PI strata for the Gallatin that represented stands with at least 40% canopy cover. What the court pointed out in its recent ruling, was that we had a definition in our Forest Plan and we were using a “proxy”, but we hadn’t made the tie between the proxy and the glossary definition. We chose to field validate our model and were able to determine that the 40% canopy cover “proxy” is consistently able to achieve the functional attributes of the glossary definition.

You may be referring to the “Montana Rule” from the Elk –Logging Study. In that case, acres of a certain PI type were multiplied by a coefficient to determine “effective hiding cover”. This is a method that is embraced by the current Lewis and Clark Forest Plan, but is not a part of the Gallatin Forest Plan. In addition, the PI strata labels are entirely different from the strata labels used by the Gallatin National Forest. For example, PI 11 for the Lewis

**and Clark Forest is a tall well-stocked mature stand. PI 11 on the Gallatin is a mature, poorly stocked stand.**

### ***NEPA/NFMA and Gallatin Forest Plan Compliance***

**Comment 11-1:** Where are the alternatives, including the no action alternative? Where is the analysis of alternatives? What is the current condition of the project area, the analysis area? What are the environmental effects, including cumulative effects?

**Response to 11-1:** On page 3 of the Supplemental EA it is clearly stated that this analysis is tiered to the Smith Creek Vegetation Treatment Project EA (USDA 2007) and the first Supplemental EA (USDA 2008). On page 9, it states that the analysis and conclusions in this Supplemental EA are based on and do not change the 2007 EA or 2008 Supplemental EA analysis except for the new hiding cover analysis which specifically addresses the court findings required for resolution of the remand. All of the above questions are described in detail in the 2007 EA.

**Comment 11-2:** Moreover, the EA fails to analyze programmatic changes in Forest Plan methodology used to determine elk cover.

**Comment 11-5:** The EA at p. 6 states: “A field protocol was developed as described in Appendix A...” This represents a “new hiding cover analysis” procedure, and a baseline “different than the baseline used in the original analysis, which did not consider the recovery potential of some forested stands to become hiding cover.” (EA, p. 8). “Potential” cover, or forest “capable of providing hiding cover” represents a new programmatic elk cover definition, which is not equivalent to the existing standard. (id.) Forest Plan standard #5 states: “Subsequent timber sale activity will be allowed after regeneration provides hiding cover.” (Plan, p. II-18). The current standard makes no reference to these vague terms.

**Comment 11-7:** The programmatic methodology being abandoned has been in constant use since 1987. A programmatic amendment to the Forest Plan such as this requires an EIS.

**Response to 11-2, 11-5, & 11-7:** The Forest Plan does not specify a methodology for compliance with the hiding cover standard, and therefore we are not programmatically changing the plan. However, the Forest Plan specifically states that “subsequent timber sale activity will be allowed after regeneration provides hiding cover.” This acknowledges the temporal impact of timber harvest relative to hiding cover; trees grow back and trees grow up and hiding cover functionality can be recovered. In our latest analysis, based on the feedback from the 9th circuit court, (unlike the previous analysis), we have determined the relationship between the 40% canopy cover modeling proxy and the Forest Plan definition of hiding cover, and are accounting for the acres, which are “capable” of being hiding cover, but which are currently not functioning as such (trees too sparse or not tall enough) by distinguishing between “baseline hiding cover” and “existing hiding cover”. This has the

**effect of putting additional constraints on the number of acres which can be treated by thinning or other vegetation manipulation, not vice versa.**

**As stated in the court order for Case 9:09-cv-00159CCL, Document 64, pp. 20-21 (02/14/11) “When evaluating agency action, courts extend deference to the agency’s interpretation of the statutes and regulation the agency administers (Natural Resource Defense Council v. Dept of Interior, 9<sup>th</sup> Cir. 1997). An agency’s interpretation of its own regulations controls unless it is “plainly erroneous or inconsistent with the regulation” (Nev. Land Action Ass’n v. US Forest Service, 9<sup>th</sup> Cir. 1993). Deference is also appropriately extended to matters within the agency’s scientific expertise (Ecology Center v. Castenada, 9<sup>th</sup> Cir. 2009)”.**

**Comment 11-9:** The NEPA document should adequately analyze the proposed mitigation measures to ensure their effectiveness.

**Response to 11-9:** On page 3 of the Supplemental EA it is clearly stated that this analysis is tiered to the Smith Creek Vegetation Treatment Project EA (USDA 2007) and the first Supplemental EA (USDA 2008). On page 9, it clearly states that the analysis and conclusions in this Supplemental EA are based on and do not change the 2007 EA or 2008 Supplemental EA analysis except for the new hiding cover analysis which specifically addresses the court findings required for resolution of the remand. Project mitigation and effectiveness are described in detail on pp. 2-30 through 2-39 of the 2007 EA.

**Comment 12-13:** The Supplemental EA notes that if the results produce a change in the proposed project, a new decision will be issued, a decision that is subject to appeal. Please define how much of a change is required before a new decision is required.

**Response to 12-13:** Additional hiding cover field data was collected and analyzed, a baseline for hiding cover was established (per the Court’s request), and results from the new analysis were compared with the original analysis. The results of the new analysis showed that there would be even more hiding cover remaining post-treatment than the original analysis, however both analyses were similar in that post-treatment hiding cover would be more than adequate to meet the Gallatin Forest Plan standard.

**A Supplemental EA documenting the new analysis and results in detail was released and the public was given an opportunity to comment on the Supplemental EA. There was nothing that was found in the field data collected, analysis, or public comments that gave the Forest Service specialists’ and decision maker reason to believe that there would be any changes needed to project design or any of the treatments proposed.**

**The Forest Service handbook (FSH) 1909.15. states, “Reconsider the original decision, and based upon the EA and FONSI, issue a new decision notice or document that the original decision is to remain in effect and unchanged.” The responsible official thoroughly reviewed the original decision for the project in conjunction with information provided in the Supplemental EA**

and Revised FONSI, and considered public comments and Forest Service responses to the Supplemental EA. After doing so he concluded that his original decision would remain in effect and unchanged. 36CFR 215.11(b) provides for appeals of a new Decision Notice after revision of an EA, however, “only that portion of the decision that is changed is subject to appeal”. There were no changes made to the decision for the Smith Creek project and therefore it is not subject to appeal.

### ***Hiding Cover, Climate Change, & Mountain Pine Beetle***

**Comment 10-2:** Within the 42 pages of the second, supplemental EA the words climate change and mountain pine beetle were used once. The reality in the Smith Creek area today is that a climate change exacerbated, mountain pine beetle epidemic is resulting in the loss, on average, of approximately 50-60% of larger trees (>20 ft tall). In a few years, most of them will be down and the nature of the forest altered. How much elk hiding cover will be available then? It is imperative that these issues be addressed. None have been addressed here or in the EA and EA Supplement 1.

**Comment 12-6:** There is no information in the Supplemental EA regarding how the pine beetle epidemic will be affecting hiding cover at present as well as into the future. Since beetles will reduce canopy cover, this would seem to be an important factor to consider.

**Response to Comments 10-2 & 12-6:** Any mountain pine beetle impacts were assessed when the field samples for hiding cover were collected. Any mortality affecting individual tree’s ability to provide screening would have been considered in the cover board and elk decoy plots. In addition, the Supplemental EA was completed to address the Court’s remand for hiding cover. In that same opinion, the Court found that global warming, i.e. climate change, was addressed and adequately considered the project’s impact in proportion to its significance (Opinion, page 14177-14178).

### ***Canada Lynx***

**Comment 8-20:** The U.S. District Court ruled this year that the FWS has to reconsider the GNF as critical habitat for lynx. Therefore, before this project can go forward, the F.S. must consult with the USFWS on the effect of this project on lynx, if the project area qualifies as lynx critical habitat and will the project adversely modify lynx habitat. By definition the logging in this project will adversely modify lynx habitat. To say otherwise is arbitrary.

**Comment 12-17:** The Smith Creek Project is subject to the Northern Rockies Lynx Management Direction ROD, published in March of 2007. As a part of that ROD, the Forests are required to implement lynx surveys in unoccupied areas as per terms and conditions of the BO by the USFWS. Since lynx foraging habitat will be destroyed, the agency needs to demonstrate that this area is not currently occupied by lynx. Otherwise informal consultation is required. There is no

information in the supplemental EA noting that these surveys have been conducted.

**Response to 8-20 & 12-17:** As discussed on page 3, the purpose of the Supplemental EA is to address the Court's holding that "the Service violated the Gallatin Plan and NFMA by not ensuring that the Project complies with the current Gallatin Plan elk-cover requirement." The opinion further states that "Plaintiffs' single meritorious argument on appeal concerns the Gallatin Plan's elk-cover requirement".

The Northern Rockies Lynx Management Direction applies to mapped lynx habitat presently occupied. Smith Creek project area is considered to be unoccupied. The USFWS list for the Gallatin Forest lists lynx occurring south of I-90 only. The Gallatin began conducting surveys for lynx in the Crazy Mountains in 2010 and will complete this work in 2011. If the Crazy Mountains are found to be occupied, the direction would then be applied. Issues regarding lynx were addressed in the original Environmental Assessment.

### ***Clean Water Act***

**Comment 8-21:** The Clean Water Act requires that federal agencies comply with its provisions. The ninth circuit court of appeals recently ruled that Forest Service roads are a point source pollutant and require a permit from the E.P.A. Do you have this permit? It is a violation of NEPA to not disclose this to the public.

**Response to 8-21:** The NEDC v Brown ruling is subject to further appeal and no injunction associated with the decision currently affects the Forest Service or the Smith Creek Vegetation Treatment Project. The exact regulatory process, format, permitting requirements of the NEDC v. Brown decision to the Smith Creek Fuels project is currently unclear but the roads associated with the project were examined in detail in a hydrology/engineering review on October 7, 2010 in order to gather the appropriate data and information that could potentially be needed for industrial stormwater NPDES permit applications. The road system that would be used for the Smith Creek Vegetation Treatment Project to the GNF Forest boundary has been updated in recent years with aquatic passage culverts, road surfacing, and additional drainage. Only a few areas were found that had road connectivity to perennial streams and all could readily be mitigated or disconnected with small sediment traps in order to avoid direct "point source" discharges.

All required water quality permits would be acquired by the Gallatin National Forest prior to any ground disturbance activities for the Smith Creek project. If logging road stormwater discharge NPDES permits are required for the Smith Creek project the Gallatin National Forest will work with the Montana DEQ to obtain the permits prior to project implementation.

Also, as stated above the purpose of the Supplemental EA is to address the Court's holding that "the Service violated the Gallatin Plan and NFMA by

**not ensuring that the Project complies with the current Gallatin Plan elk-cover requirement.”**

### ***MIS Species***

**Comment 8-22:** The previous NEPA documents for the Smith Creek project note that no wolverines, or pine martins were found. Here, the most compelling evidence suggests that the theory, applied in this Project Area, does not match reality. The lack of species sightings, otherwise ignored and unexplained by the Forest Service, undermines the assumption that by taking care of habitat, the GNF can ensure species viability. The Forest Plan requires that the Forest Service ensures the existence of viable populations of species, not the theoretical possibility that the species should be present. Moreover, without any indication that there are viable populations of MIS in the Project Area before the Project, it is unclear how the Forest Service could conclude that viable populations of MIS will be maintained after the Project.

**Response to 8-22:** As stated above the purpose of the Supplemental EA is to address the Court’s holding that “the Service violated the Gallatin Plan and NFMA by not ensuring that the Project complies with the current Gallatin Plan elk-cover requirement.” The opinion further stated that the “Plaintiffs’ single meritorious argument on appeal concerns the Gallatin Forest Plan’s elk-cover requirement (p. II-18, section 6.a.5).”

**Comment 12-16:** Since there are no goshawks in the project area, while the old growth levels are twice the level required by the Forest Plan, how can old growth be considered to be a suitable proxy for goshawk populations?

**Response to 12-16:** Again, the purpose of the Supplemental EA is to address the Court’s holding that “the Service violated the Gallatin Plan and NFMA by not ensuring that the Project complies with the current Gallatin Plan elk-cover requirement.” The opinion further stated that the “Plaintiffs’ single meritorious argument on appeal concerns the Gallatin Forest Plan’s elk-cover requirement (p. II-18, section 6.a.5).”